DO-IT Does It with Technology

by Carrie Hendrickson

DO-IT (Disabilities, Opportunities, Internetworking and Technology) is a broadly supported and increasingly influential program administered by the University of Washington. With grants and honors from around the United States, DO-IT started in 1992 and continues to provide programs throughout the U.S. Created as a project to help students with disabilities successfully complete college and enter the marketplace, DO-IT offers a variety of supporting programs. These programs range from camps, mentoring projects, online support groups, instructor training seminars, internships, and career preparation. At this point you might wonder what this inspiring program has to do with technical communication. The answer:

Three things

First. . .

Americans with disabilities are raising their sights when they look at the educational and employment landscape of America. To assist them in achieving their goals, the creation and use of adaptive technology (specialized software and equipment to enable people with disabilities to use computers and other equipment) is vital. DO-IT provides valuable assistance in the area of adaptive technology and offers several staff mentors who serve as technology specialists. They provide information about adaptive technology and assist with various technical problems. This growing field of technology will need writers and technical communicators in the future.

Second. . .

DO-IT specifically focuses on increasing the number of students with disabilities in the fields of math, science, engineering, and technology. The presence of persons with disabilities in these fields will change how technical communicators need to think and write. For example, technical communicators must now create documents with the idea that visually and physically impaired persons will access the information. The use of a head manipulated mouse, voice activated software, and visual keyboards will require a visual change in document design. With this new shift in technology, persons with disabilities will no longer be on the sidelines. They will be the engineers, scientists, and others working with the technology for which technical communicators write documentation.

Third. . .

DO-IT offers summer study programs in technical communication. The students enrolled in some of DO-IT’s summer programs learned to incorporate videos into Web pages and used Adobe PageMaker in many aspects of desktop publishing and production. With the career exploration and support that DO-IT offers to persons with disabilities, their numbers among technical communicators will increase. They will no longer be a group we will be writing about; they will be some of us — the technical communicators doing the writing.

DO-IT has received numerous awards over the past years. It received national recognition with the Presidential Award for Excellence in Mentoring. DO-IT also received the National Information Infrastructure Award “for those whose achievements demonstrate what is possible when the powerful forces of human creativity and technologies are combined.” By providing a worldwide electronic community, DO-IT brings youths with disabilities and mentors together. DO-IT also provides

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Letter to the Editors...

I would like to applaud the Techniques staff for the effective redesign of your newsletter. It takes initiative, creativity, and willingness to be open to risk in order to revamp an existing publication, especially when the previous design worked well. I think readers will be thrilled with the new look of Techniques.

The use of color and white space draws the reader’s attention to navigational aides, separates textual elements, identifies article titles, accentuates key points, and emphasizes boundaries. The addition of larger side margins improves clarity and provides a convenient place to include pictures, quotes, call outs, and other graphical elements, all which serve to make the publication more lively and interesting for the reader.

As a reader of Techniques, I appreciate the staff’s constant efforts to improve their work.

Tamara Jackson ✭✭

Thank you for your kind comments, Tamara. We enjoy hearing from our readers. Self-monitoring seldom anticipates the readers’ needs, so your feedback helps us to keep improving. Thanks for taking the time to write.

We also appreciate constructive criticism, so send us your ideas! ...The Editors

We welcome letters from our readers. Send your comments, questions, or concerns to oldesthanson@hotmail.com.

Tips, Trends, and Trivia:
Finding Job Opportunities Online

by Adrianna Greenwald

Searching for a job can lead to frustration, stress, anger, and defeat. Searching for a job on the Internet will lead to all that and carpal tunnel syndrome as well. The tips below might help as you conduct your own search.

• Try several search terms. When entering a job title and searching on monster.com or hotjobs.com, remember that technical communicator is not always the term companies use when they post job openings. Common terms for our profession include: technical writers, document managers, project editors, document design specialists, document engineers, and many others. If you try those terms and fail, read on.

• Try a simple word search. Rather than typing a specific job title, try typing a single term like document, writer, technical, or editor. These words may bring up jobs that specific titles might rule out. Try entering technical in the job entry text box and writer in the specific terms text box.

• Try lesser-known sites. While monster.com and hotjobs.com provide many opportunities, other sites can help. Search the online edition of your local newspaper. Company Web sites may also provide a listing of career opportunities. Find the sites of several companies that interest you. Keep a copy of your resume handy to email (companies often list a link specifically so interested parties can send their resumes).

If all these tips fail, you can always revert to the old-fashioned ways. Try the help-wanted section of your local paper, visit temporary agencies, or try plain old word of mouth. The right job awaits you. ✭✭
Book Review
Designing Visual Language: Strategies for Professional Communicators

Written by Charles Kostelnick and David D. Roberts, Designing Visual Language: Strategies for Professional Communicators, focuses on the visual aspects of document design. While the subject sounds intimidating, Kostelnick and Roberts succeed in explaining the theory so even a novice can easily understand it. Their book begins by giving readers an introduction to visual rhetoric.

In the remaining pages of their book, Kostelnick and Roberts use rhetorical theory and six cognates to teach readers how to practice effective visual communication. The six cognates include:
- Arrangement
- Emphasis
- Clarity
- Conciseness
- Tone
- Ethos

Throughout the chapters, which range from Perception and Design to Icons, Logos and Symbols, the authors demonstrate how the cognates can impact visual design strategies. Designing Visual Language proves very effective to guide readers through the revision process.

In each chapter, the authors present a sample document for a specific rhetorical situation. The authors then revise the sample document one or more times, each time explaining the revisions based on the six cognates. This consistent and repeated strategy for revision leaves readers with a mental tool they can easily use when revising their own documents in real world scenarios.

Kostelnick and Roberts also include exercises and assignments at the end of each chapter, which provide an excellent teaching tool for teachers in a classroom setting. They also provide practice cases for technical communicators who feel they need practice in the area of visual communication.

Designing Visual Language is a much needed addition to the Allyn and Bacon series written for technical communicators. Kostelnick and Roberts write, “The chief characteristic of the books in this series is their consistent effort to integrate theory and practice.”

The combination of theory and practice, plus many other excellent traits, make this book an excellent resource for students and professional technical communicators.

Masters by Degree

You earned your bachelor degree. Now what? Do you opt to conquer the world or continue in the halls of academia? What options present themselves for employment? What might further study offer? Does the job market look solid? Would further study enhance your chances in the professional arena? Can you afford graduate school? Can you afford not to attend graduate school?

Questions like these present common concerns for all students, and they need answers. Talk to your graduate school advisor. She can help you decide whether a particular job might meet your needs, or she can help you design a program of study to accommodate your special interests. Your academic concentration contains built-in flexibility. You just need to discover acceptable inroads to pursue. Your advisor can guide you through the process. However, you have homework to do before you talk to her.

Visit the graduate studies office and read their literature. Your bachelor degree gives you latitude to study 600-level classes in areas of your minor study too. You may even decide to pursue some of your required credits in a class involving graphic design, computer technology, electrical engineering, or speech communication. You have to decide where your interests lie, then approach your advisor with that information.

She can help tailor your schedule to include subjects that seem fun and interesting to you. Remember, you studied for a career. Now you need to make some tough decisions to ensure that your career meets your interests on all levels. You deserve a career you enjoy.

Graduate school gives you the opportunity to polish your skills and refine your abilities. Refuse to limit yourself. Invest in your future. And never, ever make choices you could live to regret.

Designing Visual Language introduces readers to visual rhetoric, and combines theory and practice for both teachers and students.
The United States continues to deal with the aftermath of the September 11th terrorist attacks. The day began with an unbelievable horror that evolved into bioterrorism. Now the United States business environment must deal with a declining economy and employee layoffs. Since companies depend on fewer employees to do more work, valuable employees possess multiple skills and a willingness to learn.

As a 1998 graduate of Minnesota State University, Mankato, my English degree, with a concentration in technical writing, and my minor in computer science equipped me with a diversified skills base. As an employee at Dataradio COR Ltd., my initial responsibilities as the documentation administrator/technical communicator included maintaining the engineering functions in our company database and writing technical manuals and other product documentation.

After organizing the documentation department and getting Dataradio’s technical manuals current, I began working with the marketing department to create product brochures. We purchased a digital camera in order to eliminate the need for outside help to provide pictures of our products. Digital photos usually require touch-ups in a graphics program. I choose to work with Adobe Photoshop software.

Dataradio made the decision to produce technical manuals on CD-ROM. We chose a universal format our customers could easily access. I learned to work with Adobe Acrobat to convert Adobe FrameMaker files to PDF format. Adobe provides free downloads of Acrobat Reader on their Web site and allows royalty-free use on CD-ROM. As our need for more CDs grew, Dataradio purchased a disc duplicator. I learned to build the programs and design labels.

My education in technical communication taught me the importance of creating materials for the end user and prepared me for my evolution from a documentation administrator and technical communicator working for the engineering department to that of technical communications coordinator working for the marketing department. While still responsible for technical manuals, user guides, product brochures, customer CDs, and engineering functions of the company database, I also help design and place our company advertisements in trade publications, distribute press releases, help maintain our Web site and attend tradeshows. I recently completed training for QuarkXPress as we convert our product brochures to the program used by our Atlanta, Georgia, headquarters.

Moving to marketing left me apprehensive because my training lies in a different field. Creating an ad campaign was completely foreign, yet, new tasks provided me with the opportunity to look at the materials I create in a new light. I see customer expectations for the manuals and user guides I create. I interact with our sales department at tradeshows and have the opportunity to talk with sales people who work with our customers. They provide information from a new perspective.

I enjoy the variety of the work I do at Dataradio and offer this article as an example for those pursuing degrees in technical communication. I believe company requirements for employees who are able to multi-task direct the future of our profession. For those of us who choose the corporate environment, our success depends on our ability to adapt to new challenges. ✤✤

Employees who are able to multi-task and are willing to learn direct the future of our profession.
Supporting International Communication with Unicode

by Alexander Bendig

Until the late 1980s, the American Standard Code for Information Interchange (ASCII) was the dominant means of representing characters in a standardized way. In times when computer memory was expensive and performance crucial, ASCII provided a good solution. It could represent 128 or 256 characters (in 8-Bit extended ASCII) efficiently in one byte of memory. This imposed its limitation at the same time; even for a language like English, ASCII had barely enough space to store all characters of the alphabet and all other symbols (e.g. mathematical, scientific) common in English-speaking environments.

Unicode was introduced to change this. It provides a unique number for every character, no matter the platform, program, or language.

Development is currently underway, and is structured by the Unicode Consortium, established in 1991 when Unicode 1.0.0 was released. The world of Information Technology (IT) changed significantly since then, heavily supported by the emergence of powerful networking technologies. The Unicode standard, an official document defining the structure and behavior of Unicode, has already reached version 3.1.1.

In its current version, Unicode recognizes more than 49,000 characters, covering the principal written languages of the world.

For further information...

Unicode Home Page: www.unicode.org
UTF-8 and Unicode FAQ: www.cl.cam.ac.uk/~mgk25/unicode.html
Unicode Transformation Formats: www.czyborra.com/utf
Unicode in XML and other Markup Languages: www.w3.org/TR/unicode-xml

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Lexpionage, (LEKS.pee.uh.nazh) n.
The Sleuthing of New Words and of Old Words Used in New Ways

by Steve Gage

From meatloaf to cornea gumbo to barfmail, lexpionage is popping up all over the Internet too fast for anyone to keep pace. I realize that much of this dancing baloney sounds more like dog food than vocabulary, but this is the world we live in, and the popularity of technological jargon increases daily. After digesting much of this, many people will require a diaper change. While this makes minimal sense to most, the intent is purely comical, but inserting the meaning of this technical jargon would give this musing absolutely no merit.

Technical Jargon Dictionary

barfmail n An email message spewed out in all directions.
cornea gumbo n A Web page, ad, or other graphic piece that is an over-designed, jumbled, soup of colors, fonts, and images.
dancing baloney n Web page-based animated images, Java applets, and other bells and whistles that detract from the overall quality of the page.
diaper change n A visit by a computer technical support employee to a troublesome user.
dog food v To use a product, particularly a software program, that you created for your company.
meatloaf n Forwarded messages, jokes, lists, and other unsolicited noncommercial email messages sent by an individual to a large number of people.
spam n Unsolicited commercial email message. See also; spamouflage, spamdexing.
UCEless adj A proposed watchword for the growing anti-spam movement.
word of mouse n Communication via computer-based means, such as email, chat rooms, or newsgroups.
mouse potato n A person who spends a lot of time at the computer.

If you would like to enrich your vocabulary further, or just try to understand some of the tech terms you have heard, but can’t quite decipher, visit www.logophilia.com/WordSpy.
Gun Moll Documents Forensic Technology

A bandoned firearms, spent cartridge cases, bits of hair and blood, and sketchy witness reports all tell a tale. Forensic scientists work to discover the facts, and forensic technologists try to make the scientific probes easier.

Forensic Technology, a Montreal-based engineering firm, creates products for forensic investigators. I document the work of a fascinating team of engineers, trainers, programmers, technicians, support staff, and forensic specialists. My job consists of uniting their perspectives and concerns into useful and usable documentation.

When I Joined Forensic Technology in January 2000, I became the first technical communicator the company hired. My first full-time job thrust me into unknown territory. Feeling uncomfortable and unsure of myself, I appreciated the welcome and reassurance of my co-workers. They emphasized the special abilities of writers, observing that, although our tools differed, we all created necessary solutions.

I worked on Gunsights™, a computerized reference of handguns, rifles, and shotguns designed as an identification tool for law enforcement officials, firearm examiners, and other professionals who deal with firearms. The scope of my task surprised me, for it included describing tens of thousands of firearm models from hundreds of firearm manufacturers. Luckily, I worked with two experienced firearm examiners, former police officers with a lifetime of firearm knowledge that they willingly shared. As my fascination increased for a field I previously found disturbing, my co-workers began calling me Gun Moll.

My tasks included summarizing company histories, researching firearm models, creating templates for firearm model entries, and correcting entries written by others. I also worked on a preliminary version of a Gunsights Help application. Soon I moved to the greater challenge of documenting Forensic Technology’s flagship product, IBISTM.

The Integrated Ballistics Identification System (IBIS) consists of a software and hardware package used to identify used cartridge cases and bullets. Law enforcement officials in several countries use IBIS to identify, apprehend, and support the successful prosecution of criminals.

IBIS acquires and catalogues the markings cartridge cases and bullets pick up from the internal mechanisms of the firearm, many as individual as fingerprints. In New Orleans, law officers arrested and prosecuted several gang members after IBIS tied them to numerous drug-related murders and assaults. In an ongoing incident in Boston, police linked three firearms they seized to fifteen previously unconnected violent incidents.

Different points of view add to my knowledge of the system. I document unique technology every day, and I managed to impress my employers with the usefulness of writers who do technical documentation.

Different points of view add to my knowledge of the system. I document unique technology every day, and I managed to impress my employers with the usefulness of writers who do technical documentation. However, the best part of my job comes each time I read a headline proclaiming “Crime Solved Thanks to New Technology.” I feel proud of my little contribution to fighting crime.

Written by Susan Patrick, reprinted and condensed with permission from INTERCOM, the magazine of the Society for Technical Communication, Arlington, VA, USA.

Bulletin Board

Mark your calendars:

Undergraduate Research Conference (URC)
March 25, 26, 2002
www.intech.mnsu.edu/researchoffice/undergraduates%20research.htm
Continuous Speech Recognition: Opening Windows of Opportunity

by Alexia Jones

Continuous speech recognition software, often referred to as voice recognition software, makes it possible for computers to decode human speech. With this software, people can control computers by dictating commands, and can compose email and word processing documents by using dictation. Speech recognition software allows the user to generate text by talking into a microphone instead of typing.

When first introduced, speech recognition software had very few and very specialized applications. The applications helped people with disabilities or repetitive stress injuries. Early versions relied on discrete speech (halted, word-by-word fashion). Advancements in technology increased the program’s usefulness by allowing for natural or continuous speech. Technology also allowed the applications to include functionality in fields such as medicine, law, and education.

*Dragon Naturally Speaking*, one of the most well-known speech recognition programs, works by using simple voice commands with a special microphone that comes packaged with the software. These commands transfer directly to the computer screen. Dragon, compatible with most Windows systems, requires only a sound card and microphone, significantly increasing the speed of producing text.

For example, most people type an average of fifty words per minute. Therefore, a 900-word document takes approximately eighteen minutes to type. Using continuous speech recognition software, a user can speak 140 to 160 words per minute, which reduces eighteen minutes of typing to a mere 6.5 minutes.

The software for Dragon requires an extended training session during which the computer system learns to recognize the user’s voice. The user accomplishes this by spending twenty to thirty minutes reading passages from a novel. Users can later train the system to recognize words not included in its vocabulary.

Drawbacks exist, however. The computer substitutes a real word for a word it does not understand. Users must carefully proofread documents for such linguistic errors. They must also maintain checks for correct usage of homonyms such as *there*, *their*, and *they’re*.

With speech recognition software, windows of opportunity, which did not exist a few short years ago, open wide with possibilities for people with both physical and learning disabilities.

As prices decrease and performance improves, speech recognition software enters the mainstream as a viable alternative to keyboards.

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Supporting International Communication. . . (continued from page 5)

The Unicode Consortium strives to eventually provide support for every known language (including dead ones). Acknowledging the importance of a standardized international character set, commonly used technologies support Unicode. These technologies include:

**Java.** The language is portable among many platforms. Standard Java class files can be transferred and used without recompiling the code. The language was designed with a global market in mind.

**Markup languages.** Often, the essential part of effective Web development is the ability to provide language support for visitors who speak a variety of different native languages.

**Operating systems.** Current operating systems like Linux or Windows 2000 have integrated Unicode support, which enables richer presentation information.

Unicode is a great aid in internationalizing software. With its help, programmers and information providers can address the needs of an international audience. Unicode is a mature standard, widely accepted and constantly evolving to integrate a broader range of languages.
Meet Our Staff

Scott Ferderer and Carrie Hendrickson

Scott Ferderer, a native of Bismarck, North Dakota, and a senior at MSU, plans to graduate in December 2002 with a BS in computer science information systems. Scott’s minor area of study coincides nicely with his major: electronic engineering technology. Previously, Scott earned an associate of applied science degree in electronic technology from Bismarck State College.

Web design, long a passion for Scott, serves him well as he works on the Techniques online team. In the past four years, Scott created multiple Web sites and started a small business in which he maintains and builds Web sites for clients.

Scott, the vice president for the MSU student chapter of STC, currently works at building the chapter Web site.

In his free time, Scott enjoys repairing computers, learning new software programs, and visiting family and friends. He also enjoys the Cartoon Channel, watching as much of Dexter’s Laboratory as humanly possible. ✤✤

Carrie Hendrickson looks forward to graduation in the summer of 2002 with a BS in technical communication. Known for her humorous personality, resourceful approach to generating articles, and creative technical ability, Carrie contributes articles and serves as a layout editor for Techniques. Carrie also serves as secretary for the MSU chapter of STC.

Carrie worked for fifteen years as the business manager/accountant for North Valley Vo-Tech Center in Grafton, ND. Since overseeing a million dollar plus budget, Carrie understands the importance of careful, detailed work and appreciates detail in well-crafted documentation.

She taught self-paced computer courses covering numerous software packages through the local community education program. Her current interests involve learning and working with adaptive technology particularly in the field of voice-activated software.

In her spare time, Carrie enjoys watching vintage movies with her husband John. ✤✤