

Where's that Symbol?

By Richard Hodgkinson

I regularly receive enquiries from exasperated writers and designers asking if there's a standard symbol for a particular function or piece of equipment and where can they find them? With over 15 years of participation in the development of standards, I can usually help but, without that background, it would be difficult to know where to begin.

National, continental and international standards organisations are constantly producing and updating their collections of standardised symbols...but exactly which symbols have been standardised and where can you find them?...**Read more**.

• Presentations: Part 2 of 3

Creating Presentations

You have done all the research; now it is time to create the presentation. So that you sound natural (i.e., extemporaneous), do not write out your presentation word for word because you tend to write more formally than you speak. ...**Read more**

• Awards

New PCS Fellow

Warmest congratulations to Alexander Petroianu, a PCS member who was just elevated to IEEE Fellow. Very few IEEE members ever achieve the honor of Fellow. If you know Alexander, please be sure to send him a note of congratulations... **Read more**.

• Write Right

Relevant Forms of Technical Writing

This installment discusses how to provide appropriate review comments, how to approach coauthorship, and how to appropriately cite others' work. ...**Read more.**

Mentors Needed

Mentoring Connection

The IEEE Mentoring Connection is looking for "online" mentors to help guide younger IEEE professionals in career planning and professional development. Currently, 989 mentees, but only 440 mentors have registered to participate. **Read More**.

•



Feature

Where's that Symbol?

By Richard Hodgkinson

I regularly receive enquiries from exasperated writers and designers asking if there's a standard symbol for a particular function or piece of equipment and where can they find them? With over 15 years of participation in the development of standards, I can usually help but, without that background, it would be difficult to know where to begin.

National, continental and international standards organisations are constantly producing and updating their collections of standardised symbols...but exactly which symbols have been standardised and where can you find them?

Here is a selection of the more recent and available standards. With the exception of the ETSI standards, you will have to pay for them. Many are available for downloading in PDF form.

Sources of Standard Symbols and Icons

The International Organization for Standardization (ISO) is located at URL http://www.iso.org/iso/home.htm.

ISO (sometimes in conjunction with the IEC) has published several symbol and icon standards:

- ISO 7000:2004 (Graphical symbols for use on equipment) is available on a DVD, and as a database on the Web in conjunction with IEC 60417 (see below). It contains over 2000 symbols for use on a variety of equipment including agricultural and earthmoving machines, automobiles, printing presses, photocopiers, mechanical saws and lathes.
- ISO 7001:1990 (Public information symbols) contains 50 symbols and is currently being revised.
- **ISO/IEC 11581 (Icon symbols and functions)** is also being revised. The published standard has five parts that address general icon information (part 1), object icons (part 2), pointer icons (part 3), tool icons (part 5) and action (toolbar) icons (part 6). (Part 4, which was to have addressed control icons, was not published.)
- **ISO/IEC 13251:2004 (Collection of graphical symbols for office equipment)** is available in electronic or paper form and contains over 370 symbols collected from a number of other standards, several of which have subsequently been withdrawn.
- ISO/IEC 18035:2003 (Icon symbols and functions for controlling multimedia software applications) contains 26 symbols. It should be used in conjunction with ISO 14915-2:2003 (Software ergonomics for multimedia user interfaces) Part 2: Multimedia navigation and control.
- ISO/IEC 19765:2007 is a Technical Report that contains the results of a "Survey of icons and symbols that provide access to functions and facilities to improve the use of information technology products by the elderly and persons with disabilities". This TR contains 59 icons and symbols in widespread use and should form the basis of a future standard. For more accessibility symbols, see also ETSI ES 202 432 (below).

The International Electrotechnical Commission (IEC) is located at URL http://www.iec.ch/.

The IEC has published two symbol standards:

- **IEC 60417 (Graphical symbols for use on equipment)** is a database containing over 1000 symbols. To access it, you need to pay a 12-month subscription. The database has overview and search functions, and individual symbols can be downloaded as PDF files.
- IEC 60878:2003 (Graphical symbols for medical equipment in medical practice) is available in printed form and contains over 600 symbols.

European Telecommunications Standards Institute (ETSI) is located at URL http://www.etsi.org/WebSite/homepage.aspx.

ETSI has published several symbol standards for telecommunications and IT, including the following:

- ETSI EN 301 462 (2000-03) contains symbols to identify telecommunications facilities for deaf and hard-of-hearing people.
- ETSI ES 202 432 (2006-10) contains access symbols for use with video content and ICT devices.

British Standards Institution is located at URL http://www.bsi-global.com.

The BSI has published two public information symbol standards:

- **BS 8501:2002 (Graphical symbols and signs Public Information symbols)** contains over 300 symbols for use in transport, travel, sport, recreation, entertainment, countryside access and general information.
- BS 5378 (in three parts) addresses safety signs and colours.

Designing symbols

If you are unable to find a suitable symbol and have developed one yourself, you might consider submitting it to ISO Technical Committee 145 for registration and inclusion in ISO 7000/IEC 60417.

Symbols for submission should be drafted according to the four-part ISO and IEC 80416 series (*Basic principles for graphical symbols for use on equipment*), which provides design guidelines and a grid for the layout and design of new symbols. Another useful publication is *ETSI EG 202 048 (2002-08): Human factors: Guidelines on the multimodality of icons, symbols and pictograms*.

Testing symbols (and icons)

You might want to test the new symbols that you've developed. Two documented test procedures are available:

- ISO 9186:2001 Graphical symbols Test methods for comprehensibility and comprehension.
- ETSI ETR 070 (1993-06): Human Factors: The Multiple Index Approach (MIA) for the evaluation of pictograms. For an example of how these two tests can be used, see ETSI TR 102 520 (2006-10) Access symbols for use with video content and ICT devices: Development and evaluation. This report can also be accessed from <u>http://portal.etsi.</u>

org/stfs/STF_HomePages/STF286/STF286.asp.

Designing icons

Guidance for designing new icons, or adapting them from existing symbols, can be found in:

- ISO 80416-4:2005 Basic principles for graphical symbols for use on equipment Part 4: Guidelines for the adaptation of graphical symbols for use on screens and displays (icons).
- ETSI EG 201 379 (1998) Framework for the development, evaluation and selection of graphical symbols.

This article was previously published in the Spring 2007 edition of the UK Institute of Scientific and Technical Communicators journal, the "Communicator". <u>Richard</u> <u>Hodgkinson</u> worked for IBM United Kingdom at the Hursley Park software development laboratory between 1971 to 2004. He is currently a senior associate of TecAccess and is a Fellow of the UK Institute of Scientific and Technical Communicators. Richard has participated in the development of international standards since 1990 as a PUKE (Principal UK Expert!), Swedish or US expert, during which time he has edited 10 standards addressing icons, symbols, software documentation, and software accessibility. He is currently the convenor of ISO/IEC JTC 1/SC 7/WG 2 – Software & Systems Documentation (see George Hayhoe's article) and is an expert on ETSI Specialist Task Force 333, which is preparing a report on procurement requirements, legislation, and standards for accessible ICT products in support of European Community Mandate 376.

Copyright ©2007 IEEE Professional Communication Society. All rights Reserved.



Feature

PCS Participates in Developing ISO Standards

By George Hayhoe

For the past two years, I've chaired the Professional Communication Society's Standards Committee. PCS President Luke Maki lured me away from preliminary work I had begun on a future International Professional Communication Conference in Hawaii by promising me fame, fortune, and exotic travel if I became Mark Haselkorn's successor as Standards chair because Mark had just been elected vice president of PCS.

Luke fibbed about the fame and fortune, and he neglected to mention the hard work required, but there has been some travel involved (though not all to exotic destinations). So, let me tell you a bit about my experiences in the world of standards these past two years.

Background

About four years ago, the PCS AdCom, at Mark Haselkorn's urging, decided to pursue an active role in the development of standards relevant to professional communication. Some of our members, myself included, had participated in writing *IEEE Standard 1063, Standard for Software User Documentation*, in 1987 and revising it in 2001. Mark discovered that this IEEE standard was going to be incorporated into a new suite of ISO standards being planned by one of the ISO/IEC software and systems engineering working groups, and became a member of the working group.

The following standards are a part of that suite:

- ISO/IEC 26511, Requirements for Managers of User Documentation (currently in working draft)
- ISO/IEC 26512, Requirements for Acquirers and Suppliers of User Documentation (currently in working draft)
- ISO/IEC 26513, Requirements for Testers and Assessors of User Documentation (currently in working draft)
- ISO/IEC 26514, Requirements for Designers and Developers of User Documentation (final draft international standard recently sent to ISO for balloting by national standards bodies)

Another four ISO/IEC standards are planned to address requirements for software and lifecycle documentation. (For those not familiar with the acronym, ISO/IEC stands for the International Organization for Standardization and the International Electrotechnical Commission, the bodies jointly responsible for developing international standards within IEEE's fields of interest.)

The working group—officially designated ISO/IEC JTC 1/SC 7/WG 2, which is shorthand for Working Group 2 of the ISO/IEC Joint Technical Committee 1, Subcommittee 7—consists of experts from Australia, Canada, Japan, New Zealand, the United Kingdom, and the United States. Mark was appointed co-editor of ISO/IEC 26514 with Annette Reilly from the IEEE Computer Society and the Society for Technical Communication (STC). The working group had just completed

IEEE/PCS News:Feature

preliminary planning for these standards when Mark was elected vice president of PCS and Luke asked me to take on the task of representing PCS on the working group.

Working draft

I was unable to attend the May 2006 JTC 1/SC 7 plenary meeting in Bangkok, but at that meeting, the working group reviewed a preliminary draft that Annette had prepared, based on IEEE 1063-2001 and ISO/IEC 18019:2004 (*Guidelines for the Design and Preparation of User Documentation for Application Software*), as well as several British national standards. That summer, I invited feedback on that draft from about a dozen user documentation experts, many of them PCS members, from the US, the UK, and Canada.

These experts offered many suggestions for revising the draft, which Annette and I reviewed carefully during several lengthy telephone calls as we considered which comments should be incorporated into the next draft. Based on those conversations, I prepared the "committee draft" (ISO-speak for the first draft of a standard submitted for balloting by national standards bodies) in July 2006.

Committee draft

Comments from the initial round of balloting were due in October 2006, so Annette and I worked for two and a half days at the meeting of the US Technical Advisory Group (US TAG for short) in Seattle in late September 2006 to prepare the US national body's recommendations on the draft. Our colleagues on WG 2 did the same for their national bodies.

After all national body comments had been submitted in early October, WG 2 assembled as part of the ISO/IEC JTC 1/SC 7 interim meeting from 31 October to 2 November 2006 in Seoul to resolve more than 600 "technical comments" on the draft. (Technical comments address the substance of the draft standard and are not simply cosmetic or editing suggestions.)

Spending three days in Seoul may sound exotic, but we spent 25 hours over those three days in a hotel meeting room talking about fine details of meaning, hammering out a consensus on some thorny issues, and sometimes arguing about matters that might seem insignificant to casual observers. Were there too many shalls (requirements) in the standard? Would those requirements be considered too burdensome by potential adopters?

Of course, we didn't spend the entire week working. One evening, we met with members of STC's newly established Korea chapter to explain the work we were doing. Then they hosted us for dinner at a traditional local restaurant, where we sat on the floor around low tables and enjoyed Korean cuisine. On the final afternoon of the interim meeting, we spent about 90 minutes touring Gyeongbokgung, the former royal palace and the adjacent museum, and another hour at the Itaewon shopping street where we bought souvenirs of our stay.

It was an exhausting experience, but when it was over, we had successfully addressed those 600 comments. Once back home, I prepared a revised "final committee draft" (the term ISO uses for the final draft on which technical comments can be submitted) with the help of Annette as well as STC member Rob Schneider. That draft went to the national standards bodies for another round of balloting in early January 2007.

Final committee draft

This time around, Annette and I recommended only 17 technical comments to the US national body. By the time that the

IEEE/PCS News:Feature

other national bodies submitted their ballots, however, there were nearly 250 technical comments to be discussed at the next meeting of WG2, held in Moscow as part of the May 2007 JTC 1/SC 7 plenary.

We spent nearly two days in Moscow discussing those comments. Again, we considered each of the proposals to change the document, heard out the arguments on each side, and finally reached consensus. Once the technical comments on the final committee draft of ISO/IEC 26514 were resolved, we discussed preliminary drafts of two of the other three standards and made suggestions to the editors responsible for those documents.

Because this meeting occurred after the end of my university's academic year rather than during a week in term, the trip was not as hectic as the journey to Korea the previous October. I was able to stay longer in Moscow and do some sightseeing, including a memorable tour of the Kremlin with many of the other delegates.

After returning home, I revised the draft in consultation with Annette and with the assistance of PCS member Tracey Wofford to reflect the resolution of technical comments and to incorporate the editing suggestions that had also been submitted by the national bodies. This "final draft international standard" has now been submitted for an up-or-down vote by the national bodies, and the results of that vote will be known before the May 2008 JTC 1/SC 7 plenary meeting in Berlin.

Future work

This past September, I travelled to Denver for a one-day meeting with Annette as part of the US TAG meetings. There, we discussed the preliminary drafts of the three other user documentation standards in preparation for the meeting of WG 2 in October in Cleveland. (This time, the working group did not meet with the rest of JTC 1/SC 7, which gathered in Montréal.) I was not able to attend the Cleveland meeting because of a death in the family, but the preliminary draft of the meeting minutes indicates that the group held extensive discussions of the three drafts and also talked about the four standards for software and lifecycle documentation that we will tackle when the first four are completed.

The work already scheduled for WG 2 will likely require two or three more years to complete. Because all of the participants have full-time responsibilities and most are active in professional organizations as well, the time they have available for standards work is limited. Furthermore, the effort required to draft ISO/IEC 26511, 26512, and 26513 is significantly greater than was needed to prepare ISO/IEC 26514, because existing standards provided Annette with an excellent starting point for that standard. The time required for national bodies to review and comment on the various drafts of each of the standards extends the process significantly as well.

I would welcome participation from any member of PCS (or anyone else with an interest in professional communication standards) in this important work. Any degree of participation that you wish to contribute to the effort would be appreciated, from serving as a reviewer of drafts of the three standards currently being developed to volunteering as a potential editor of one of the other four standards being planned. There are places at the table for anyone interested.

In addition, Annette Reilly is looking for a volunteer to serve as ongoing editor of *ISO/IEC 24765*, *Software and Systems Engineering Vocabulary*. This standard consists of a database of terms and their definitions derived from the "Definitions" clauses of other ISO/IEC standards in the software and systems engineering field.

When I began as chair of the PCS Standards Committee two years ago, I thought that I had a good understanding of what international standards are and how they are developed. I never dreamed that the development process was as complex and

```
IEEE/PCS News:Feature
```

lengthy as I have learned that it is. However, because it is an international process, all countries that want to have their voices heard and their views considered are welcome to participate. I hope that other members of PCS will consider joining this process. Please contact me at **george AT ghayhoe DOT com** if you want to participate.

<u>George Hayhoe</u> is professor of technical communication at Mercer University. He is a senior member of IEEE and the IEEE Professional Communication Society, and is a past president of the society. A fellow of the Society for Technical Communication, he has edited its journal, Technical Communication, since 1996. He holds a PhD in English from the University of South Carolina. His professional interests include content management, product and document usability, research in technical and professional communication, and core competencies of professional and technical communicators.

Copyright ©2007 IEEE Professional Communication Society. All rights Reserved.



Presentations: Part 2 of 3

Making Presentations: Creating the Presentation

by Elizabeth Pass

This article is the second in a series of 3 articles covering presentations in a business setting. Part 1 is "Preparing for the Presentation" and the following article will be "The Day of the Presentation."

The first article of this 3-part series on making presentations shows you some ways to prepare for a presentation, and this article helps you to create the presentation. Even though you are a professional, facing clients, your boss, or a roomful of peers can make the best of us break into a sweat. But the better prepared you are, the better chance you have of keeping that nervousness in check.

Creating the Presentation

You have done all the research; now it is time to create the presentation. So that you sound natural (i.e., extemporaneous), do not write out your presentation word for word because you tend to write more formally than you speak. It will sound awkward and not natural because it's the written word and not the spoken word. Instead of writing it out, outline your major points.

I prefer note cards because I can move around the room and hold the cards unobtrusively. Also, paper tends to shake more obviously if you are nervous. If you are going to use note cards, be sure to number them. If you are anything like me, you will certainly drop them at some point; you want to be able to put them back in order! If you are going to use paper, use a large point size, so that you can see the page easily if holding it at least waist height while standing up. Nothing is worse than watching someone struggling to make a professional impression while grabbing a piece of paper and pulling it up to his or her nose in order to see the next point to be discussed.

Writing content

When creating the content for the presentation, be sure you emphasize for the audience why the topic is of value to them. What you leave out of the presentation is just as important as what you include in the presentation. Do not load the audience down with unnecessary information. Never forget that it is all about them. You may have done an enormous amount of research for your presentation; however, the audience does not need all that information just because you researched it.

When organizing your presentation, remember the presenter's mantra:

- Tell them what you're going to tell them.
- Tell them.

• Tell them what you told them.

Tell them what you're going to tell them

This is an effective guideline to follow. When constructing your outline, be sure to let your audience know what you are going to say, so they know the main point and what will be covered. In your introduction, highlight the main points you are going to cover.

Tell them

As you are telling them, let them know where you are in the presentation. Unlike a printed text, people cannot reread if they need to, or use headings to look ahead and see the scope of the content. Because people can't reread text or see heading, it is important that you mark your presentation with visual signposts, such as "First," "Second," "Now," "Next," "In conclusion." Also, use repetition so that you drive home the important points.

Tell them what you told them

Then, in the conclusion tell them the highlights of what you just covered. The reason for this organization is that people tend to remember the first and last of what they hear (primacy-recency effect), so forecasting what is coming and summarizing the high points of what you said helps the audience remember your message.

It's important to start with a strong attention-getter and end with a strong closing statement. First, it makes you more persuasive, giving the audience a better impression of you than if you started with "Hello. My name is...." and ended with "That's it. Any questions?" Second, you will engage the primacy-recency effect with a strong opening and closing statement.

Your audience's attention span is at best 20 minutes, and it peaks at 10 minutes. If at all possible, try to keep your presentation 20 minutes or less. If you can't, try to break it up with something (e.g., visuals, discussion, interaction).

Your language should be concrete and not abstract. This is especially important because your audience is listening, not reading, and it is much harder to visualize abstract ideas than concrete ones. Therefore, use examples, anecdotes, statistics, and expert testimony—material to which the audience can relate. (Do be careful that narratives (anecdotes) don't go too long.) Data—numbers—should be rounded off to whole numbers unless preciseness is vital. As with abstract and concrete language, numbers are hard to visualize.

Creating visuals

One of the most important tips for creating visuals is to make sure you understand the environment so you can match the appropriate visuals to the situation. There is no need to spend a lot of time making wonderful PowerPoint slides if the room you are presenting in doesn't have an LCD projector or networked computers to show the visuals.

This leads to another important tip—*ALWAYS have a backup plan.* Expect the computer to shut down. Expect the bulb to go out in the overhead projector or docu-camera.

When creating visuals, make sure you make them large enough for everyone in the room to see what's on the screen. Do not think you can just read off the screen to them if the point size is too small because you are trying to put everything in a few

```
IEEE/PCS News: Presentations
```

screens/slides. What's the point of having a visual if you are now reading it to them?

Make sure that your visuals are perfect—no grammar, punctuation, or mechanical errors. Errors on a visual seem so much worse than anywhere else, and you will lose credibility with your audience.

So, check and double-check both your equipment and visuals. You can never be too certain.

Take into account the time it takes with visuals during the presentation—setting up and taking down the presentation, and transitioning within the individual pieces. It will take longer than you think.

I like to give an audience what I call a party favor –something they can take with them when they leave. This could be such items as a list of resources, a summary of the project progress report, or a project success matrix. It helps the audience feel they got their money's worth.

Practicing the presentation

It is important that you practice your presentation to be extemporaneous. Each time you run through your presentation it should be different. This will make it sound more dynamic and persuasive when you present, and less monotonous and flat.

Also, it is better to be a bit short on time (just a little); the audience will love you. If you can get across what you are trying to say and give them back a few minutes, they will appreciate you and see you more favorably. If you cannot end a few minutes early, do not go long; the audience will become resentful. By running long you are taking time away from your audience that you aren't allowed, and time is precious. You will lose credibility and thus persuasiveness in the eyes of the audience if your presentation runs long.

If you will be using a microphone, practice with one beforehand so that you are used to it. If it is a podium microphone, you need to know how close you need to stand to it and get comfortable with that posture. If you will be using a wireless or lanyard microphone, you need to practice holding your head in the correct position. For all microphones, you need to practice knowing how loud you need to speak into it.

Traveling to the presentation

If you are traveling to your presentation, carry on all your presentation materials with you, in case your luggage gets lost in transit. Also, carry all your contact names, numbers, and locations you will possibly need with you. Make sure they have your contact information (cell phone). Anything could happen, and you want to be able to get in touch with the people you need to; also, if they need to get in touch with you, you want them to be able to.

If you have a chance, check the room where you will be giving your presentation ahead of time. You will want to know the layout of the room (e.g., location of the light switch, screen, LCD panel). Not only will you be better prepared, but also you will feel more comfortable, which will help you to focus your energy.

Remember

- Write the presentation as you would talk
- Show your audience how the information applies to them

- Give them a party favor
- Finish just a few minutes early.

Look for Part 3 of Making Presentations in the next newsletter, "The Day of the Presentation."

Resources

Gurak, Laura J. (2000) Oral Presentations for Technical Communication. Allyn and Bacon: Boston.

Hindle, Tim. (1998) Making Presentations. DK Publishing: New York, NY.

Murray, Angela. (1999) Business Presentations. Teach Yourself Books: London.

Peoples, David A. (1992) Presentations Plus. Second Edition. John Wiley & Sons: New York, NY.

Templeton, Melody and Sparks FitzGerald, Suzanne. (1999) *Schaum's Quick Guide to Great Presentation Skills*. McGraw-Hill: New York, NY.

Weissman, Jerry. (2003) Presenting to Win: The Art of Telling Your Story. Prentice Hall: Upper Saddle River, NJ.

Woelfle, Robert M., Ed. (1992) A New Guide for Better Technical Presentations: Applying Proven Techniques with Modern Tools. IEEE Press: New York, NY.

Elizabeth Pass is an Associate Professor at the Institute of Technical & Scientific Communication at James Madison University in Harrisonburg, VA. She is also the Membership Chair for PCS.



Tools and Technology

How to Make Standards Invisible...

By Neil Perlin

...and have it be a good thing.

Standards surround us, and new ones appear non-stop from a range of standards bodies, including the following:

- **OASIS** (<u>www.oasis-open.org</u>) that defines standards ranging from the somewhat familiar DITA and DocBook to lesser-known ones like AVDL (Application Vulnerability Description Language).
- The W3C (<u>www.w3.org</u>), which defines standards ranging from the commonly accepted ones like XHTML and CSS to the more esoteric like RDF and SPARQL.
- ISO (www.iso.org)
- NISO (<u>www.niso.org</u>)
- IEEE (<u>www.ieee.org</u>)

Deep breath...

With so many organizations defining standards, standards must be good things that everyone can use. Typically, however, practitioners view standards as dry and esoteric topics to be avoided... unless they apply directly to you, in which case they're invaluable. Two examples:

• **HTML and XHTML** – HTML is of course the original standard that created the web, and XHTML is its XML-ified version. Dry and esoteric, until you see the benefits.

For example, I'm currently on a project to convert a client's RTF-based WinHelp system to XHTML. The project dates back to 1995, two years before HTML even hit the online help world. Working with the old RTF, for which there were few code or development standards, has been entertaining. The huge increase in the predictability and reliability of the codes, source files, and authoring tools as I take the project from RTF through HTML to XHTML comes from the apparently dry and esoteric HTML and XHTML standards.

• **CSS** (**Cascading Style Sheets**) basically control content formatting. The standard is dry and esoteric when viewed at the code level. But few other technical communication-related standards have done more to increase the consistency and extensibility of our material, or to make it easier for us to add that consistency and extensibility.

Both standards share the quality of "invisibility." Our authoring tools, especially online tools like RoboHelp, Flare, et al., support these standards but hide the technical detail. If you use RoboHelp HTML, you're authoring in HTML but using an interface that looks like MS Word. If you use Flare, you're authoring in XHTML but using an interface that looks sort of

```
IEEE/PCS News:Tools
```

like MS Word. We can define styles by pointing and clicking through the tools' interface, without knowing about the details of CSS. This "invisibility" is good because it lets us focus on our real jobs – creating content – rather than on running the authoring tool.

The problem is that many standards that might apply to technical communication have not yet reached invisibility. This means that practitioners have to do four things:

- 1. Learn what standards exist that may be applicable.
- 2. Learn what those standards do.
- 3. Decide whether those standards are applicable.
- 4. Adopt and learn the standards and integrate them into the company culture.

In the rest of this column, I'll describe these tasks and discuss why responsibility for them falls between the practitioners and the standards bodies.

1. Learn What Standards Exist

How can we learn what standards exist that might be applicable? There's no shortage of sources of information, as evidenced by the partial list of standards bodies at the top of this column. The problem, based on what I see in my training and consulting work, is that most practitioners not only lack the time to investigate new standards, but don't even know they exist. In my experience, especially with clients outside high-tech, few practitioners have heard of the W3C; almost none have heard of OASIS, ISO, or IEEE.

In my opinion, and with no offense toward those with whom I've discussed this issue, the lack of awareness means the standards bodies must do a better job of evangelizing their products. If they don't, then practitioners won't use a standard, no matter how useful it may be.

A mix of conference presentations, articles in practitioners' journals like the STC's *Intercom*, and webinars, produced by the standards bodies themselves, might be a good start if they're strongly "sold." (I tried something like this a few years ago at the STC annual conferences and got great support from the standards bodies, but poor attendance. Marketing a topic like this isn't easy.)

2. Learn What Those Standards Do

Even after we learn that a particular standard exists, it's often hard to understand exactly what it's supposed to do. The descriptions are often written by the developers for their technical peers, so they're often incomprehensible to anyone else.

In my opinion, and again with no offense toward anyone with whom I've discussed the issue, the standards bodies must do a better job of explaining and making the case for their products in plain English. (People in groups like IEEE and DITA groups are often taken aback when I point out that many of my clients still don't understand apparently long-accepted concepts like HTML vs. XML vs. XHTML, or even the difference between index keywords and search terms.)

Again, a combination of conference presentations, articles in practitioners' professional journals, webinars, etc., would go a long way toward increasing awareness and use of a standard – e.g., "we're going to discuss a standard called SVG and explain why it would help you to use it..."

3. Decide Whether Those Standards Are Applicable

Once we learn what a standard does, we must then decide whether it is applicable to our company. In some cases, the answer is a clear "yes" - CSS for example, because its technical benefits are overwhelming once we understand them. Other cases are more difficult, DITA for example.

Many groups are pushing DITA as the path to structured authoring. But practitioners first have to define structured authoring, then decide whether their company needs it, and only then decide if DITA is the way to get there. This makes the decision more difficult because it involves factors outside the documentation group's traditional boundaries, such as strategic planning.

What's needed here are case studies and white papers that make the business case for a standard and discuss the technical and workflow details of implementation. Given the cost of many new tools, cost-justification worksheets that use traditional financial analysis methods would also help sell the standards and required tools to management.

4. Adopt, Learn, and Integrate the Standards Into the Culture

Once practitioners decide that a standard applies and make the case to management, the typical next step is to buy a tool and go to work. Too often, however, this marks the end of organized implementation. There's no training on the tool ("You'll figure it out...") or the concepts behind the standard ("Why do you need to know that? That's why we bought you that tool."), and no attempt to fit the standard into the company culture.

Of these three problems, it's cultural fit that often causes the most trouble. Companies are thrust into a higher-tech world for which they lack the attitude. The result is often staff dissatisfaction and turnover, inefficient use of the standard and tools, and a loss of confidence on management's part. How important is culture? Two examples:

- HTML hit the online help world in February 1997, but I was running WinHelp classes as late as 2002. The two clients for which I ran classes in 2002 saw the benefit of switching to HTML (RoboHelp HTML in both instances), but weren't ready to alter the workflows and job descriptions that had evolved over nearly a decade. Culture...
- I recently spoke with the documentation manager of a large company that wants to convert 3,000+ Word documents ranging in length from 10 pages to 15,000 to an XML-based modular form, possibly DITA. He was concerned about finding the right tools and training, but equally concerned about how this change was going to affect the department's culture.

What's needed here are white papers that realistically discuss what must be done from technical, business, and culture standpoints in order for standards to be implemented efficiently and made a part of the environment. At which point, those standards will have effectively become invisible too.

About the Author

Neil Perlin is president of Hyper/Word Services (www.hyperword.com) of Tewksbury, MA. He has 28 years experience in technical communication, with 22 in training, consulting, and development for online formats and tools like WinHelp, HTML Help, JavaHelp, CE Help, RoboHelp, Flare, Mimic, Captivate, and others now known only in legend. Neil is a member of IEEE and STC, an associate fellow of the STC, and the founder and manager of the Beyond the Bleeding Edge stem that ran at the STC annual conference from 1999 to 2006. You can reach him at nperlin@concentric.net or www.

IEEE/PCS News:Tools

hyperword.com.

<u>Neil Perlin</u> is president of Hyper/Word Services (<u>www.hyperword.com</u>) of Tewksbury, MA. He has 28 years experience in technical communication, with 22 in training, consulting, and development for online formats and tools like WinHelp, HTML Help, JavaHelp, CE Help, RoboHelp, Flare, Mimic, Captivate, and others now known only in legend. Neil is a member of IEEE and STC, an associate fellow of the STC, and the founder and manager of the Beyond the Bleeding Edge stem that ran at the STC annual conference from 1999 to 2006.

Copyright ©2007 IEEE Professional Communication Society. All rights Reserved.



Write It Right

Reviews, Coauthorship, and Citations

by Judy Goldsmith and Robert H. Sloan

This installment discusses how to provide appropriate review comments, how to approach coauthorship, and how to appropriately cite others' work.

Responding to the Review Process

In this section, we briefly discuss correcting conference and journal papers in response to referees' comments. If your paper is accepted to a conference, nobody checks whether you make any changes in response to the referees' comments on the version submitted to the program committee. However, you should take all the comments you get very seriously and make changes whenever you do not actively disagree with the comments you received. You should do this both because it's simply the right thing to do, and because you will be judged by the quality of your conference papers.

You will receive much more elaborate comments from the referees of journal papers. You must address all the referees' comments, or your journal paper might not be accepted. Besides making the changes, you should keep a careful record of all the changes that you make (and places where you do not make changes because you believe the referees are mistaken in a particular comment). You should send this record, as well as the corrected article back to the editor.

Determining Coauthorship

Expectations about who should be an author vary widely. Most commonly, each author contributes at least one of the following:

- Statement of the problem
- Underlying idea(s) of the solution
- Work of coding, running experiments, analyzing data; and/or proving theorems
- Writing the paper.

Some researchers believe that anyone involved in discussing the problem should be a coauthor. Some discount some of the above tasks, and demand that coauthors be involved in several of them; anything less merits a note in the acknowledgments. In particular, many feel that the work of coding alone does not entitle a person to be a coauthor. We advise our readers to seek clarity about coauthorship expectations before entering into work that you believe will be worthy of coauthorship.

In some fields, notably theoretical computer science, names of coauthors are always listed in alphabetical order. Some

groups list authors in accordance with their contributions; this is common in software engineering. There are other constraints that may play a role in ordering. This is something you should discuss early in the coauthorship process.

Using and Citing Others' Work

As is mentioned repeatedly in **last month's installment**, it is important to put new work into the context of previous and contemporary work on the subject. If the results or methods you are presenting are unlike anything anyone has done on that problem, it is important that you explain this novelty. To do so, you have to explain what everyone else does differently than you.

Most research builds on earlier work. If your research does, then it is necessary that you convince your readers that what you have done is somehow different from what everyone else has already done. If you do not know what others have done or are doing, then you cannot make a convincing argument that yours is new, different, and exciting.

We begin by talking about finding relevant related papers and the expectations for different types of source. Then, we talk about talking about others' work. We also present some of the mechanics of quoting, citing, and putting together a bibliography. This is intended to highlight the distinctions among analysis, reference, quoting, and plagiarism.

Finding Sources

Before there was a World Wide Web, there used to be libraries full of books and journals. In fact, there still are. In cities, universities, and many companies and labs, there are still libraries. Furthermore, many libraries are willing to share resources through interlibrary loans. If you cannot •nd a paper online, it may still be available in hardcopy. And, if those two options fail, you may be able to obtain a copy by writing to an author, asking if she or he is willing to send you a copy. It may arrive electronically or on paper.

How do you •nd out what papers you want? Start by looking at the tables of contents of relevant journals, online or on paper. You look at the titles of papers in relevant conferences. If you do not know the journals and conferences, use a search engine with the key words and the word "conference" or "journal."

Once you •nd a paper of interest, look at the papers it cites. Look at the papers that cite it. You can •nd the latter using <u>Google Scholar</u>, <u>Citeseer</u>, or the <u>Science Citation Index</u> (SCI). Google Scholar and Citeseer are both freely available on the web; SCI requires a paid subscription. Many, probably most, universities have a subscription to SCI.

Expect to spend significant time looking for relevant work. There is nothing so discouraging as discovering, after years, or even only weeks, of work that your result was discovered or your method investigated, "simultaneously and independently," years before. If you are reinventing something, it is not new, and therefore cannot (or at least should not) be (re)published.

Furthermore, other people often have good ideas. Once those ideas are published, you are free to use them, as long as you give credit to the folks who came up with them. (See "**<u>Bibliographies and Citations</u>**" for when citation is needed. Next month's installment will cover the mechanics of citation.)

Evaluating Sources

The standard of evaluating a source of information is usually the degree to which it has been subjected to peer review. We

IEEE/PCS News: Write It Right

discussed the different reviewing processes last month.

Journal papers go through multiple rounds of detailed reviewing. Conference papers go through one or two rounds of less careful reviewing, often by fewer people. Technical reports often are not reviewed, nor are Web pages. Theses and dissertations are reviewed by the student's advisor and graduate committee, some of whom may be outside the student's research field. Grant proposals are not reviewed in detail, though a funded proposal usually means that someone in a funding agency believed that the proposer knew what she was talking about, at least at a high level.

The reviewing process is far from infallible. However, it is the best we have. Remember that conference acceptance is as heavily influenced by what is "hot" as by quality of work or writing. However, quality of work and writing are factors.

When possible, it is best to use journal articles as sources, perhaps with technical reports for additional detail that was omitted from the published version. However, there are two limitations of journal articles:

- Many authors present their work at conferences, but do not write up a full version for journal submission. This means that you are stuck with a paper that was written for a deadline, reviewed under a deadline, and had a strict page limit. If you are lucky, all the necessary information is there for you to evaluate the work.
- Journal publication is relatively slow, and some parts of software engineering research move extremely quickly. The appearance of an article in a journal typically occurs nine months to two years after the work being reported has been completed; conference papers typically have a lag of six months.

Self-published papers online or as tech reports or blogs might seem a better choice than the terseness of conference papers. But remember that people can put anything they want onto their Web pages. (See, for example, Bovik, Goldsmith et al. (2003) on Markov Indecision Processes.)

Many good survey articles aimed at researchers can be found in *ACM Computing Surveys*. There are many good survey articles aimed more at practitioners available in the "popular" journals, such as *IEEE Software* and *IEEE Internet Computing*. Survey articles are called "secondary sources." They don't present new research, but discuss work newly presented elsewhere. A survey article can provide you with new ways of thinking about the work being surveyed, and can lead you to other papers. However, survey writers have biases and opinions about the work they discuss. It is better to read the original papers, if you can •nd them.

Finally, remember that the Wikipedia is not a primary source. At best, you •nd scholarly, but possibly biased articles. At worst, you •nd inaccuracies placed there by pranksters or well-meaning, but ill-informed people. Like any encyclopedia, it can be useful to give you a first overview and a set of pointers to other sources. But, you must go further than that.

Compare and Contrast

When you present someone else's work, the first question you should answer is, "What problem are they trying to solve?" It will save you immense headaches if you answer this question as you read their paper. You may discover that the paper you are reading is not relevant to your work.

The next thing you should ask is, "What are the objects of interest?" For example, if Ada is measuring code, is she looking at lines of code, or number of objects or number of methods? What is being measured? What unit of measurement is she using? Person-minutes or calendar-weeks?

Once you identify the objects, you will be led to the question, "What encodings are being used for the objects?" Later analysis of details will be impossible or inaccurate without this information.

Only then do you ask, "What is the proposed solution to the problem?"

At each question, you should answer the following questions: "How is it similar to what others— or I—have done? How is it different? Are the differences improvements, and why?"

Note that your exposition of your own work should answer those questions, pretty much in that order. You can refer to the solution of the problem in your introduction. You should describe the problem (unless it is absolutely standard for your readers) in your abstract, and then describe your solution.

Direct Quotes

When you read a really well-written paper, it may seem foolish to paraphrase the authors' writing, rather than simply using their writing verbatim. Sometimes it is appropriate to use their words, although you must make clear, beyond a shadow of a doubt, that those phrases or sentences that you put into your paper are the work of someone else. Any claim or implication that those are your sentences or long phrases is plagiarism.

An excellent paper by Harold S. Stone on copyrights addresses the issues of plagiarism and even self-plagiarism (Stone, 1992). The Association of Computing Machinery also has clear guidelines on the subject (ACM, 2005), as do all journals and publishers.

In one case that received recent publicity, a graduate student discovered that previous students had submitted theses with identical text, from paragraphs to pages. Later students cited the earlier theses and dissertations as sources, but did not indicate that they had copied whole chunks of text. Those students were told that they had to rewrite their theses or have their degrees withdrawn. (Voice of America, 2006.)

This is just one example of the ill effects of plagiarism. Students can be kicked out of universities, papers withdrawn from publications, jobs lost, and reputations ruined.

Now that we have your attention, we want to raise three questions: When is it appropriate to quote directly? How do you indicate a direct quote? When must you cite even if you do not quote directly?

Direct Quotes

It is appropriate to quote directly when you are commenting on the fact that a given author or authors said something. In other words, when you are as interested in the fact that the text was written, or written by those people, as you are in the content. For instance, if the author has said something that you disagree or agree with; if the phrasing is particularly interesting or unusual; if it is surprising that those particular authors would discuss such a thing. If you discover a section of your software engineering textbook that discusses religion, you might quote that section in your review of the book. Occasionally you may add a direct quote to an article in response to a referee's criticism, to show that some expert agrees with your position rather than the referee's position.

If you are quoting anywhere from a phrase to a couple of sentences, you enclose the quote in quotation marks, and follow it with a citation. For example, "This metric is the best thing since sliced bread!" [Ada, 2006a].

If you are quoting a longer section, typically six or more lines (different style books recommend mildly different thresholds), you set off the quote as a separate, completely indented text:

I add only that errors in general detract from your credibility. Even if your reader does not herself know precisely what rules you are breaking, she will certainly notice whether your thoughts are easy to understand. If you write muddy, indecipherable prose, riddled with mistakes, your reader is bound to wonder how carefully you designed your study, collected your data, applied statistical techniques, validated your system, or otherwise behaved like a respectable scientist. [Dupr'e, 1998, p. xxi]

Furthermore, for sufficiently long quotes of the works of others, you need explicit permission from the owner of the copyright of the work you are publishing. No style book can say where the precise threshold for needing to seek permission is, because this is a matter of copyright law and its doctrine of fair use rather than a matter of writing style. *Editor's note: It's best to be cautious. If the quote is longer than a couple of sentences, get permission from the copyright holder. You must always get permission to re-use graphics.*

Formulae and Theorems

The other notable exceptions to the rule against direct quotes are mathematical formulae and theorems, where an exact direct quote is often appropriate. In those cases, the text should clearly state the source. Precise usage varies. For theorems, some place the citation on the last line; others in parentheses between the word "Theorem" and the statement of the theorem. For formulae, some put the citation in the last line of the formula; others merely put a citation in the text near the theorem.

Indirect Quotes

Be aware that if you are using others' ideas, you must cite them even if you are not using their words. For instance, if you restate some of Ada's writing in your own words when you are discussing Ada's work in your related work section, you must explicitly cite Ada's work at the place where this occurs. It is not sufficient only to include Ada's work in your bibliography; indeed, some would consider the absence of an explicit cite to be plagiarism even if Ada's work is included in your bibliography.

By "citation," or "cite" for short, we mean a short in-line thing, such as "[Ada, 2006a]" that points to an entry in the list of "references," "sources cited," or "bibliography" that appears at the end of the paper.

Articles that clearly fall into the "popular" category are an exception to this rule, because readers expect a short References list. For example, *IEEE Software's* author guidelines suggest that a typical article will be limited to roughly 15 entries. If your information comes from more than the allowed number of references, then you should list the most important sources of the information. Popular articles are fundamentally different because there is no presumption that unattributed material is your own research.

Bibliographies and Citations

Almost every publication has a preferred style of bibliography. If none is specified, you can refer to the *Modern Language Association Handbook*, your favorite technical writing book (you can use either Zobel's or Dupr´e's if you don't already

```
IEEE/PCS News: Write It Right
```

have a favorite), or your favorite well-written paper.

You should keep a bibliography •le or database of works you have cited or think you might someday cite. In fact, any time you read a technical paper, it is useful to enter its bibliographic information. Consider also entering a brief annotation for your own use. Some day, you may want to retrieve that information.

If you use the LaTeX typesetting system, there are canonical forms for storing the information using Bibtex. One advantage of LaTeX is that it can take your entire database (stored as text files) and generate a bibliography in your preferred style of exactly those references cited in your paper. Furthermore, having the references available on an ongoing basis will save you from doing the same work over and over.

There is no excuse for misspellings, typos, or incorrect information in a bibliography. Every bibliographic entry must answer the questions of who/what/where/when.

For a journal article, you need the title of the paper, the author(s) name(s), the journal name, date, and pages. It is helpful to have the volume and number, if they are used by that journal.

For a conference paper in a conference proceedings, you need the title, author(s), conference name, date, and—if the proceedings are hardcopy—pages of the article. If the proceedings exist online, the URL is helpful, and if the proceedings exist only on CD, then this fact should be made clear. It is helpful to give both the name of the conference and its acronym, for example, "The International Conference on Computer Aided Verification (CAV)."

Technical reports have, in addition to titles and authors, institutions, dates, and usually numbers. If they appear in online repositories, that information is also helpful to the reader who wants to read further.

A URL is not a complete bibliographic entry. Web pages are ephemeral. The citation should ideally include the author(s) of the page (who may be either human or institutional), the title of the page if it has been given one by its authors or those who use it, what sort of document the page was (e.g., a blog, technical report of a particular institution, personal page, conference paper, etc.), the date the page was posted, and the date you referenced it.

When in doubt, look at the references in a few good papers. Conference paper page limits encourage authors to skimp on bibliographic entries as well as contents, so look at the bibliographies of journal papers.

Be aware that we are today in a time of transition in publishing because of the influence of the Web. You may •nd that your favorite journal's or style book's guidelines for exactly how to prepare bibliographic entries are changing frequently.

Next Column

The next column will discuss the mechanics of writing and citing other works.

References

ACM policy and procedures on plagiarism, October 2005.

Bovik, H. Q.; Goldsmith, J. Q.; Klapper, A. Q.; and M. Q. Littman. (April 2003) "Markov indecision processes: A formal model of decisionmaking under extreme confusion", *Journal of Machine Learning Gossip*, pages 1-9.

The Chicago Manual of Style. (2003) University of Chicago Press, 15th edition.

Dupr'e, L. (1998) BUGS in Writing, A Guide to Debugging Your Prose. Addison Wesley Professional.

Gibaldi, J. (2003) MLA Handbook for Writers of Research Papers. MLA Book Publications, 6th edition.

Gordon, K. E. (1993) *The Deluxe Transitive Vampire: A Handbook of Grammar for the Innocent, the Eager and the Doomed.* Pantheon.

Gordon, K. E. (2003) *The New Well Tempered Sentence: A Punctuation Handbook for the Innocent, the Eager, and the Doomed.* Mariner Books.

Handbook of Writing for the Mathematical Sciences. (1998) SIAM, second edition.

Johnson, J. (July 2005) On mathematical writing. Accessed on October 18, 2006.

Kitchenham, B.; Pfleeger, S. L.; Pickard, L.; Jones, P., Hoaglin, D.; Emam, K. E.; & Rosenberg, J. (2002) "Preliminary guidelines for empirical research in software engineering", *IEEE Trans. Software Eng.*, 28(8):721-734.

Knuth, D. E.; Larrabee, T. L.; & Roberts, P. M. (1989) *Mathematical Writing*. Mathematical Association of America. Reprint (with corrections) of Technical Report 1193, Stanford University Computer Science Department, 1988.

Parberry, I. (1994) "A guide for new referees in theoretical computer science". *Information and Computation*, 112(1):96-116.

Shaw, M. (2003) *Writing good software engineering research papers: Minitutorial*. In Proc. 25th Int'l Conf. Software Eng. (ICSE 2003), pages 726-736.

Stone, H. S. (December 1992) "Copyrights and author responsibilities". IEEE Computer, pages 46-51.

Strunk, W. & White, E. B. (1999) *The Elements of Style*. Longman, 4th edition. The original 1918 edition of Strunk is available online at URL <u>http://www.bartleby.com/141/</u>.

Thomson Scientific. Science citation index. http://scientific.thomson.com/products/sci/

Voice of America. (23 August 2006) "Ohio University accuses engineering graduates of plagiarism". *VOA News*, August 2006. Downloaded October 11, 2006 from URL http://www.voanews.com/specialenglish/archive/2006-08/2006-08-23-voa4.cfm.

Zobel, J. (2004) Writing for Computer Science. Springer, 2nd edition.

```
******
```

IEEE/PCS News: Write It Right

Judy Goldsmith is a computer science professor at the University of Kentucky. Her research interests include decision making under uncertainty; automation of information elicitation; preference elicitation, representation, and aggregation; computational learning theory, and structural complexity.

<u>Robert H. Sloan</u> is a professor (and acting department head) of computer science at the University of Illinois, Chicago. His research interests include application of computer science theory and algorithms to problems from artificial intelligence, especially machine learning ("computational learning theory") and knowledge representation; computer security, especially access control; and computer science education.

Copyright © 2007 IEEE Professional Communication Society. All rights Reserved.



Professor Grammar

There Should Be No There's There

By Professor Grammar

Recently, the Professor arrived to the movies on time for a change, and noted that the theatre displays advertisements on the movie screen for those patrons lucky enough to arrive ahead of schedule. The Professor is not sure how many of her students bother to read these advertisements, but was shocked to the point of spilling her popcorn when she saw one in huge three-foot-tall letters on the screen that read:

Did you know that at the Megaplex, there's two parking structures?

The Professor launched out of her seat and instructed the hapless early-bird patrons about the importance of using proper grammar, in this case the importance of subject-verb agreement with the lesser known expletive construction. (English has three expletives: "it is," "there is/are," and "here is/are.")

My dear students, we all stray now and then in our speech and use the offending "there's" with a plural noun, but have we become so accustomed to this sort of slang that we would allow it to creep into our writing? Worse, that we would see it in writing and not even wince? The Professor knows that it is a lot easier to say, "There's many reasons" than to say, "There are many reasons," and so has looked the other way for years. Perhaps, if we used expletives less, we might avoid many of the offending "there's." For example, would the advertisement have been any less effective if it had said:

Did you know that the Megaplex has two parking structures?

The Professor is willing to spend \$10 for a movie ticket and another small fortune for popcorn and a soda, but she will not tolerate grammar abuse of this sort waved in her face!

After educating her fellow movie-goers, the Professor located a theatre employee and endeavored to confront the culprit behind this grammatical atrocity. Unfortunately, the Professor found the employee less than enthusiastic about furthering her cause, yet well aware of the existence of two parking structures. Hrrrumph! Perhaps, I shall write a letter.

Copyright (c) 1996, 2005 by IBM Corporation. Used with permission. Professor Grammar is an advisor to the IBM Silicon Valley Laboratory Editing Council. Each month, she sends a lesson to the technical writers at the laboratory. Many of Professor Grammar's lessons are based on tenets described in the Prentice-Hall book, Developing Quality Technical Information: A Handbook for Writers and Editors, which was recently authored by the Council.



President's Column

Transitions

By Luke Maki

The time has come to move on. My responsibilities as Society President transition to our very capable Vice President, Mark Haselkorn (and a prior PCS President), at the stroke of midnight on the evening of December 31, 2007. The December issue of the *Newsletter* also marks my last 'President's Column.' Due to some constraints in newsletter publication schedules over the next month, I am writing this before the TAB meeting scheduled for November 16-17 in Boston. Thus, I can't fill you in on what happened at the meeting in this column, but will plan to provide an article for the January 2008 newsletter.

In reflecting on the last two years, and focusing on the relative health of the society as a whole, I can say the PCS is in a good position to grow and contribute to the fields of interest it represents, and to the IEEE. The reasons for this assessment are many:

- **Finances:** Societal finance worries have been put to rest with the restructuring of the way 'overhead' is allocated to all societies. Further, Jeffrey Douglas, PCS Treasurer, has done an excellent job of taking over the reins from prior Treasurer, Steve Robinson. Thanks to Steve for his continued mentoring, and conference treasurer involvement.
- **Publications:** Both the *Transactions* (Kim Campbell, Editor) and the *Newsletter* (Kit Brown, Editor) are top-notch, with excellent editors managing them quality and quantity. In the case of the *Transactions*, Kim Campbell is phasing out as Editor-in-Chief, but as she does, she is helping to train our new Editor-in-Chief, Jo Mackiewicz. We look forward to Jo's contributions. Also, thanks to Nominations Chair Helen Grady and her team in taking on the search committee task this year to find our new Editor.
- **Conference Budget Management:** IPCC conference committees are ensuring budgets are in line with IEEE directives, and are doing their utmost to keep to those budgets so that the PCS not only remains solvent, but builds reserves that can be used to start new initiatives. General Chairs for IPCC conferences are noted below, and their contributions and volunteerism, along with their conference committee members, are greatly appreciated:
 - o IPCC 2008 Montreal, Quebec, Canada: Kirk St. Amant
 - o IPCC 2009 Hawaii, USA: Brenda Huettner
 - o IPCC 2010 Twente, The Netherlands: Michael Steehouder
 - o IPCC 2011 Blacksburg, Virginia, USA: Wally Lee/Monica Mallini
- **Operations:** The Administrative Committee (AdCom), with the leadership of Marj Davis and Elizabeth Pass, contributed to the development of an Operations Manual for the society, which will help ensure continuity of operations from year to year as Adcom members and volunteers change, and to capture policies to help guide the AdCom in decisions. Efforts will be made to finalize and publish the Manual in the first part of 2008. While I am on the topic of Operations, thanks to PCS Secretary Muriel Zimmerman as well, for not only the tasks performed as Secretary (which are increasing), but also taking on the Awards Committee, as well as working with Kirk St. Amant

to transition the IEEE Press Liaison role.

- Society Review Completion: The AdCom completed a Society Review cycle with the TAB Society Review Committee (the final report will be approved at the November 2007 TAB meeting). Among some of the SRC recommendations were excellent perspectives regarding ways the PCS could become more engaged with other IEEE societies, as well as reach out to regions.
- New 'Interactive' Website: AdCom Member Brian Still, with able support from Sandy Bartell, developed a new website for the PCS (Drupal-based) that promises to provide to members a better opportunity to become engaged with the society, interact, contribute, and promote the many fields of interest the society represents. The site is hosted by IEEE, and their IT folks are very interested in seeing how this approach works for the society. Please check it out, login, and interact! The URL is <u>http://ewh.ieee.org/soc/pcs/</u>.
- **Regional Activity:** AdCom Member (and VP-Elect) Tom Orr has been Regional Activities Chair, working to organize regional contacts and networking with committee members Michael Steehouder, Debbie Davy, and Aaron Benitez. Tom practiced what he preached, spearheading the establishment of the Japan Chapter of PCS, and followed that up with an international seminar in October at the University of Kaizu. AdCom Member Wally Lee is working to establish a NoVa/Wash/Baltimore Chapter. A Siberian Chapter was also established last year.
- **Standards Involvement:** AdCom member (and past President) George Hayhoe has been heavily involved with ISO committees in the development and revision of user documentation standards. Specifically, he has had a hand in the following standards, and is representing PCS and the IEEE well:
 - o ISO/IEC 26514, "Requirements for Designers and Developers of User Documentation"
 - o ISO/IEC 26511, "Requirements for Managers of User Documentation"
 - o ISO/IEC 26513, "Requirements for Testers and Assessors of User Documentation"
 - o ISO/IEC 26512, "Requirements for Acquirers and Suppliers of User Documentation"
- AdCom Representation: This year, 2007, marked the first time that the AdCom had at least one representative from each of the 10 IEEE Regions. The recent elections continue this into 2008, with the addition of two members from Region 10. The need to better represent Regions 7 through 10, to reflect PCS members' geographic distribution and their interests, is being realized. Again, thanks to Nominations Chair Helen Grady and her team in helping to make this happen.
- Education Activities: Thanks to Julia Williams for her continued efforts in building a portfolio of product. The new website also offers new possibilities, beginning with the podcast hosted by George Hayhoe, "Six Tips for Effective E-Mail," found at <u>http://ewh.ieee.org/soc/pcs/index.php?q=node/41</u>. I see on the website that Roger L. Boyell has added a seventh tip!

We have had some fun this year, too. As I noted in the October newsletter, the 50th Anniversary celebration of the PCS during IPCC 2007 was excellent! Marketing and Publicity Chair Brenda Huettner made the arrangements, including music from the 1950s and the retro theme. It is believed that this was the first dance PCS has ever hosted....and hopefully not the last! Brenda, thanks for all your efforts!

I have really appreciated the opportunity to serve the PCS as President these past two years. As I told the AdCom at our last meeting in Seattle, I don't intend to disappear. I have been appointed as the PCS representative on the new Technology Management Council that starts in January 2008 (was the Engineering Management Society). I have some contributions due for the PCS Operations Manual (no, Marj and Elizabeth, I haven't forgotten!). I will represent PCS via my involvement with the IEEE RFID 2008 conference in April 2008. I want to attend IPCC 2008, IPCC 2009, IPCC 2010, IPCC 2011, and beyond! I will be around, assisting here and there. I hope some of you who read this, and haven't had the opportunity to take part in PCS activities, will make the opportunity to do so. The Professional Communication Society has a place for you.

Luke Maki is the current President, but soon to be Immediate Past President, of IEEE-PCS, and works for The Boeing Company.

Luke Maki is the current President, but soon to be Immediate Past President, of IEEE-PCS, and works for The Boeing Company.

Copyright © 2007 IEEE Professional Communication Society. All rights Reserved.



Editor's Column

Another Year

by Kit brown

If last year was the "Year of Travel", this year has been the "Year of Change". Virtually everything in my life has changed or is in the process of changing--from my location and life circumstances to my cell phone. About the only thing that hasn't changed is that I'm still your friendly editor.

Shortly, my border collie and I will be embarking on a great adventure. We will be moving to Colorado to join my fiancée, his teenaged children, and their dog of indeterminate breeding. After years of sharing my domicile with only my dog or sundry other pets, I'm looking forward to the chaos and energy of having a family around. Still, it will be a big adjustment.

I will still do consulting, though it will be interesting going from working at all hours whenever I need to or want to, to having a more regular work schedule to accommodate the family's needs and schedule.

As part of the transition, I had to get a new cell phone....

Standards

Getting a new cell phone made me think about standards (or the lack thereof), and how important they are for reducing waste, improving user experience, and ensuring consistency. One of the things I hate about the cell phone industry is that every time I get a new cell phone, I have to also buy all new accessories--even if I upgrade within the same brand. It drives me crazy--I mean really, how many millions of power adapters, car chargers, headsets, and so on end up in landfills because the cell phone industry hasn't bothered to standardize the holes the accessories plug into?!

Such waste is a symptom of larger societal issues, and ultimately, will lead to our demise if we aren't careful. Engineers have the power to alter our course by developing, using, and enforcing appropriate standards and best practices that encourage us to leave a smaller footprint. But, I will climb down from my soap box and return to the topic at hand...

Three articles this month discuss various aspects of standards development:

- Richard Hodgkinson discusses symbols.
- George Hayhoe tells us what PCS is doing to participate.
- <u>Neil Perlin</u> explains how standards can improve our work day.

Postcards and Surveys

Postcards went out last week to PCS members for whom we do not have adequate email addresses for. If you are not

receiving email notification of the newsletter, please go to the subscription page and add yourself to the notification list.

The first draft of the member satisfaction survey is under review and will come out shortly. Please take the time to answer the questions, as they will assist the AdCom and me in serving you better. We hope to make it an annual survey.

Have a Happy Holiday season however you choose to celebrate it!

Peace and happiness in the New Year.

Copyright © 2007 IEEE Professional Communication Society. All rights Reserved.



Book/Web Site Reviews

Editor's Note: Several IEEE members have written books of interest to PCS members. If you would like to have it reviewed by a newsletter volunteer, please contact Kit Brown at <u>pcsnews.editor AT ieee.org</u>.

Kurzweil's Latest Book

By Philip Bernick

The Singularity is Near: When Humans Transcend Biology. by Ray Kurzweil. 2006. Penguin: New Your. pp. 672. ISBN: 0-1430-3788-9. URL: <u>http://singularity.com/</u>

Those of you who may have missed Ray Kurzweil's keynote address at this year's IPCC (and even if you didn't) will want to have a look at his latest book. Following themes discussed earlier in *The Age of Intelligent Machines and The Age of Spiritual Machines: When Computers Exceed Human Intelligence*, this book looks at the future through the lens of technology--and more specifically, information, intelligence, and technology.

From bio-technology to nano-technology, Kurzweil covers it all. The title comes from Moore's law, which recognizes that computing capacity doubles every two years (and costs half as much). At this rate, according to Kurzweil, the computing capacity of our machines will shortly reach that of the human mind. When the two converge we have reached singularity.

The best thing about this book is that it is provocative, and brings to light, by what it does and doesn't address, some important issues in our technology-driven culture and shrinking planet. Further, it helps explain why Kurzweil believes that in 15 years, each additional year one lives will add an additional year to their life expectancy. It's a book that puts the issue of people's beliefs about technology and its relationship to human beings and their relative places in society into clearer relief. Interestingly, it also implicitly begs the question of who will develop, run, and drive the power structures of the future. You will want to read this, if only for a primer on the state of the bleeding edge, and where some would like to see it go.

Philip Bernick is an affiliate of the Institute for Common Environments, LLC, a consultant with McCulley/Cuppan, LLC, and Communication Technology Advisor to the Center for Nanotechnology and Society at Arizona State University. As a researcher, educator, and longtime IEEE member, he spends much of his time exploring ways to help people collaborate effectively across time, space, and disciplines.



Tidbits

Editor's Note: I am always looking for strange, fun, or interesting technical communication tidbits. Please contribute freely.

Opportunities Online for Entrepreneurs

From www.womenentrepreneur.com/article/2134.html

Though Web 2.0 isn't the newest development anymore, this area of online technology is exploding. The term is being thrown about everywhere, from ritzy benefit galas to tabloid TV. Social media have officially arrived. **Read more**...

Tips on Documenting Workplace Bullies

From WNBC-TV, New York

Workplace bullies can cause serious problems not only for the person being bullied, but for the company as well. This article provides tips for dealing with bullies. **Read more**...

US Government Launches Blog

From www.smartbiz.com

The life of a small business executive is jam-packed with meetings, many of the face-to-face variety, which enable the entrepreneur to make valuable connections with clients and vendors. Such meetings eat up time and money, precious resources to any company diligently watching the bottom line. Today, though there is an alternative to wasting valuable time traveling and to leaving behind a carbon footprint as large as Sasquatch's: Web conferencing meeting services, which especially include value-oriented providers such as HearMe (**www.hearme.com**). **Read more**...

Copyright © 2007 IEEE Professional Communication Society. All rights Reserved.



Job Announcements

Editor's Note: We have had several requests to post job openings. If you would like to post your opening, please send the job announcement in a Word document with minimal formatting to Kit at <u>pcsnews.editor@ieee.org</u>. The jobs will remain on the list until the closing date listed in the announcement.

Copyright ©2007 IEEE Professional Communication Society. All rights Reserved.



Society News: PCS Events

PCS on Second Life

IPCC 2008

PCS on Second Life

IEEE has purchased an island on Second Life (http://secondlife.com/) and PCS is planning to be one of the pioneer societies to move in (following the Robotics and Automation Society who have already built some cool stuff). Anyone interested in helping PCS with its SL plans and efforts, come to IEEE Island and check it out. One easy way to get there is search on "IEEE Island" and hit the "teleport" button. You'll probably run into one or more of us and we can chat. More to come...

IPCC 2008 in Montreal

By IPCC 2008 Committee

Even though IPCC 2007 is just over, we are already planning for IPCC 2008. The Call for Proposals is out, and we are looking for volunteers. Volunteering for the conference is a great opportunity to meet other members, learn new skills, and to influence the society. For more information, go to <u>http://ewh.ieee.org/soc/pcs/?q=node/2</u>.

Copyright © 2007 IEEE Professional Communication Society. All rights Reserved.



Society News: Member News

Fellow

Japan Seminar

PCS Member Elevated to Fellow

Warmest congratulations to Alexander Petroianu, a PCS member who was just elevated to IEEE Fellow.

According to the IEEE website,

The grade of Fellow recognizes unusual distinction in the profession and shall be conferred only by invitation of the Board of Directors upon a person with an extraordinary record of accomplishments in any of the IEEE's designated fields of interest.

The year of election to the grade of Fellow is the year following affirmative action by the Board of Directors in conferring the grade of Fellow. The candidate shall hold Senior Member grade at the time the nomination is submitted. Normally, the candidate shall have been a member in any grade for a period of five years or more preceding January 1 of the year of election; however, the five-year membership requirement may be waived for a Fellow candidate who has been engaged in professional practice (as needed to qualify for Senior Member grade) in a geographical area where, in the judgment of the Board of Directors, it was difficult to become a member previously, as evidenced by the absence of a Section previously and the recent formation of a new Section to cover that geographical area. In such case, membership of five years or more in a recognized local electrical, electronics, or computer engineering society may substitute for the five-year IEEE membership requirement, when the nomination is submitted within four years after the formation of the new Section.

Japan Seminar A Success

by Thomas Orr

IEEE/PCS News: Society Events



On October 19, 2007, the IEEE Professional Communication Society's Japan Chapter held a one-day international seminar at the University of Aizu called the *Professional Communication Seminar in Japan* (PCSJ), in conjunction with the IEEE 7th International Conference on Computers and Information Technology (CIT 2007), the 6th International Conference on Bioelectromagnetism (ICBEM 2007), Workshop on Databases in Network Information Systems (DNIS 2007), and the 8th International Symposium on Special Media (ISSM 07-08).

Although the seminar was small by comparison to the hundreds of participants who attended the other conferences at the same conference site, PCSJ participants remarked that the size and quality of the event made it extremely good for audience involvement in the presentations, as well as fruitful discussions afterward. In total, 15 attendees from Japan, India, Canada, Slovakia, England, and the United States joined one or more of the PCSJ activities, with nearly all requesting that similar seminars be held on a regular basis at either the same site or at other historic resort locations around Japan.

The opening keynote, titled *Professional Communication in Japan*, was delivered by seminar chair, Thomas Orr, followed by eight presentations:

- Effective Methods for Teaching Technical Presentations in English for Japanese Engineering Students: Case Study at the School of Engineering, University of Tokyo (Y. Ono & K. Morimura)
- Special English Lesson: Special Program to Enhance English Communication Skills of Engineering Undergraduate Students at the University of Tokyo (K. Morimura & Y. Ono)
- Using Knowledge Models for Designing Problem-Solving Activities in a Technical Writing Course (D. Roy & N. Johnson)
- Web Accessibility through an Alternative Interface (A. Jan•igová & R. •urikovi•)
- Design of a Set of Systematic Learning Assignments for Writing Clear Japanese (K. Abe)
- Using Open Source Systems to Teach Technical Document Production in a Japanese University (J. Brine & D. Roy)
- How to Publish a Book on Professional English Presentations (M. Hirai)
- A Survey and Analysis of English Communication Needs among Japanese Engineers Working at Manufacturing Sites in English-Speaking Countries (A. Yamazaki)

Papers were printed for archival purposes in a small bound Proceedings, with discussions on issues raised by the papers continuing throughout the presentation sessions, during lunch, and afterward over dinner, where Laurence Anthony concluded the event with a closing talk at a local restaurant (See photos). Those who had enough energy left to continue the festivities even further sang on into the night at a local karaoke parlor.



{insert photos}



A PDF version of the PCSJ proceedings may be requested by sending email to **t-orr AT u-aizu.ac.jp**.

IEEE/PCS News: Society Events

Tom Orr is head of the PCS Regional Activities committee, Vice-President Elect for IEEE-PC, and a professor at the University of Aizu in Japan.



Society News: AdCom News

Pictures from IPCC 2007 Now Available

The pictures from IPCC 2007 are now available in a web album for your viewing pleasure. Many, many thanks to Karen Schriver, Michaël Steehouder, and Takashi Okuda for contributing pictures.

To view the thumbnails, go to the **<u>album page</u>**.



Calls for Articles/Proposals/Courses

Online Video Competition NEW!

Mass Media Fellows NEW!

Mentors NeededNEW!

IEEE Educational Opportunities

IPCC 2008

International Journal of Design

Design Squad TV

Today's Engineer

Online Video Competition: \$10,000USD Scholarships

URL:	http://www.ieeeusa.org/communications/video_competition/
Deadline:	Friday, 18 January 2008
Competition:	Online Engineering Video Competition for Undergraduate Engineering Students

WASHINGTON (11 October 2007) -- IEEE-USA is launching an online engineering video competition for undergraduate engineering students on "How Engineers Make a World of Difference," and will award seven scholarship prizes totaling \$10,000 to the undergraduate students who create the most effective 90-second video clips aimed at an 11-to-13-year-old student audience. The clips should reinforce engineers' contributions to the quality of life and help debunk engineering stereotypes. In addition to the scholarship prizes, winning entries will be shown during National Engineers Week 2008 and displayed on IEEE.tv and *SPECTRUM Online*.

The competition is open to all U.S. undergraduate students in engineering. Entries can be provided by individuals or teams -- with at least one undergraduate participant who is an IEEE Student Member. More than one video entry is allowed. Entries must be submitted through YouTube by midnight Eastern Time on **Friday**, **18 January 2008**. The competition will be judged by two engineering graduate students and Nate Ball, engineer-host for PBS' "Design Squad."

For more information on how to enter the IEEE-USA Online Engineering Video Scholarship Competition, and upload an

```
IEEE-PCS: Call for Articles
```

entry on YouTube, go to http://www.ieeeusa.org/communications/video_competition/

IEEE-USA has been actively involved in promoting public awareness of engineers and engineering since 1981. Working in tandem with its sister organizations, IEEE-USA has helped to foster and maintain a positive image of engineers and engineering through a variety of programs aimed at specific audiences using targeted media.

For more information on IEEE-USA's public-awareness program, see <u>http://www.ieeeusa.org/communications/default.</u> asp.

IEEE-USA advances the public good and promotes the careers and public-policy interests of more than 215,000 engineers, scientists and allied professionals who are U.S. members of the IEEE. IEEE-USA is part of the IEEE, the world's largest technical professional society with 370,000 members in 160 countries. See <u>http://www.ieeeusa.org</u>.

Mass Media Fellows

Internship Opportunities:	Mass Media Fellowships open to both undergraduate and graduate students
Deadline:	Friday, 18 January 2008
URL:	http://www.aaas.org/programs/education/MassMedia/

Since 2000, in conjunction with the AAAS program, IEEE-USA Engineering Mass Media Fellows have backed nine U.S. IEEE undergraduate and gradate students who have helped journalists in print and broadcast fields communicate authoritatively to the public about science, engineering and technology.

IEEE-USA Mass Media Fellows have been engaged by such media outlets as *Scientific American*, the *Chicago Tribune*, and WNBC-TV.

Mass Media Fellows must be at least a senior in college majoring in one of the following fields:

- mathematics
- engineering
- natural, physical, health, computer or social sciences.

Fellows review their experiences in the program in articles appearing in the November *Institute Online* and in the November-December *IEEE Potentials*.

LeaderPoint Executive Experience

Courses:	http://www.leaderpoint.biz/ieee.htm
Educational Partnerships:	www.ieee.org/partners
Location:	Kansas City, Missouri USA

LeaderPoint, a company specializing in executive and management development sessions and newest member to the IEEE Education Partners Program, is offering members a 10% discount on its Executive Experience session. The session, a five-

```
IEEE-PCS: Call for Articles
```

day, comprehensive development program designed to advance leadership and management skills, is held in Kansas City, Mo. The Executive Experience will help participants gain the following skills:

- Build cooperation in seizing opportunity and gaining greater commitment
- Practice using systematic tools for strategic planning
- Diagnose and correct dysfunctional group dynamics
- Focus personal development in specific areas
- Develop a management mindset for improving business results

Each session has an assessment component which provides a summary of LeaderPoint's observations, the participant's comments, and specific recommendations.

Participants can contact LeaderPoint at any time for follow-up work, questions, and concerns. For more information on LeaderPoint visit <u>http://www.leaderpoint.biz/ieee.htm</u>. For general information on the IEEE Education Partners Program visit <u>www.ieee.org/partners</u>.

Mentors Needed

Website:	http://www.leaderpoint.biz/ieee.htm
Contact:	www.ieee.org/partners

The IEEE Mentoring Connection is looking for "online" mentors to help guide younger IEEE professionals in career planning and professional development. Currently, 989 mentees, but only 440 mentors have registered to participate.

Mentor participation is open to all IEEE members above the grade of Student Member. Soon, we will be inviting Graduate Student Members to join the program. These members have graduated with their first professional degree and are presently in a graduate program (Masters, MBA, PhD, etc.). We will need additional mentors in the program to handle the requests from this new group. We need you!

Presently our mentors represent the following positions:

- Associate Dean and Professor
- Director of Engineering
- Senior Sales Engineer
- Project Manager
- Corporate Owner
- Consultant
- R&D Technical Manager
- Licensing Manager
- Division Manager Control Systems
- Electrical Engineer
- Vice President Research
- Director Customer Operations

- Computer Scientist Branch Chief
- Senior Product Development Engineer
- Design Engineer Power
- Retired

If you have received an invitation to join the program and been thinking about it, now is the time to join. If you have already signed in as a mentor - thank you for participating.

Gary Hinkle, a mentor in the program, says "Helping young engineers develop in their careers is very rewarding. Working with some of these individuals has proven to be quite a challenge, because of the diversity among those seeking mentors. I'm glad to be contributing to this program."

The program enables the mentee to select their mentoring partner online from a list of individuals who have volunteered to serve as mentors. After mentors are identified as a potential match, they are contacted and asked to begin establishing a relationship.

Interested members can visit <u>http://www.ieee.org/mentoring</u> for information on the roles and responsibilities of each mentoring partner, including additional program information and an FAQ page. Potential mentors are asked to review the time and effort commitment to the program necessary to ensure a successful mentoring partnership. To enter the program website, please go to <u>http://www.mentoringconnection.com</u> and use the IEEE Group ID "IEEE2006" to enter for the first time. Once in, you will need to set your own User ID and Password.

If you have any questions, please contact Cathy Downer, Regional Activities, at c.downer AT ieee DOT org.

Educational Opportunities from IEEE

Online Courses:	Expert Now http://ieeexplore.ieee.org/modules.modulebrowse.jsp
Educational Partnerships:	http://www.ieee.org/web/education/partners/eduPartners.html
CEUs	http://www.ieee.org/web/education/ceus/index.html

Staying technically current in today's ever-changing workplace is a career must if you want to maintain your professional edge or your P.E. license as required by more than 30 states in the US. IEEE offers an innovative new product called *Expert Now* as well as a growing service, Education Partners Program to help meet your continuing professional development needs.

Expert Now is a collection of over 65, one-hour long, interactive online courses on a variety of topics, including, but not limited to, the following:

IEEE-PCS: Call for Articles

- aerospace
- circuits & devices
- communications
- computing
- laser & optics
- microwave theory & techniques
- power
- reliability
- signal processing
- software.

Presented by experts in the field, each course brings to your desktop the best tutorial content IEEE has to offer through its technical meetings that take place worldwide. Continuing Education Units (CEUs) can be earned upon successful completion of the assessment. To review the course catalog visit <u>http://ieeexplore.ieee.org/modules.modulebrowse.jsp</u>.

For those looking for a more robust educational experience, more along the lines of a longer online course, or a more traditional classroom setting, the IEEE Education Partners Program can prove helpful in your search for continuing professional development opportunities. Exclusive for IEEE members, it provides access to more than 6,000 online courses, certification programs, and graduate degree programs at up to a 10% discount from academic and private providers that IEEE has peer reviewed to accept into the program. To review the current list of partners participating in the program visit <u>http://www.ieee.org/web/education/partners/eduPartners.html</u>.

Another way to browse for a course or educational events taking place in your area is through the courses registered with IEEE to offer CEUs. To review what's available in your area visit <u>http://www.ieee.org/web/education/ceus/index.html</u>. IEEE is an Authorized provider of CEUs through the International Association for Continuing Education and Training, as well as an authorized provider of CEUs for the Florida State Board. IEEE CEUs are also accepted by the New York State Board, and can easily be converted into PDHs. One CEU is equal to 10 contact hours of instruction in a continuing education activity. IEEE CEUs readily translate into Professional Development Hours (PDHs) (1 CEU = 10 PDHs).

For more general information on IEEE's Continuing Education products and services, visit <u>http://www.ieee.org/web/</u> <u>education/home/index.html</u>. Specific inquiries can be directed to Celeste Torres via email, <u>c.torres AT ieee.org</u>, or by phone +1 732 981 3425.

IPCC 2008 Call for Papers

Conference:	IEEE International Professional Communication Conference 2008 (IPCC 2008)
Dates:	July 13-16, 2008
Location:	Concordia University, Montréal, Canada
Proposals Due Date:	15 December 2007
Website:	http://ewh.ieee.org/soc/pcs/?q=node/2

The information economy is based on the collection and the exchange of data and ideas. We all either contribute to or use materials from the information economy in most aspects of our everyday lives. As a result, the information economy exists as an environment in which we are all contributors and consumers. Within this system, effective communication is essential to success, allowing individuals to contribute ideas and information effectively and to make efficient use of the goods and services. Few of us, however, understand all of the nuances of the information economy or the communication factors that affect its operations.

This conference seeks to examine or to "open " this economic model by examining the connections between communication practices and the products, practices, and services that constitute the information economy. The objective of such an examination will be to help attendees better understand and participate in the information economy as both contributors and consumers.

The conference will take place on the campus of Concordia University in Montréal, Canada and will consist of paper presentations and panel discussions that focus on various communication, design, social, and cultural aspects of the information economy.

Possible Topic Areas

Suggested topic areas include but are not limited to the following:

- Establishing and assessing the value of knowledge work and knowledge products
- Information design, usability, and accessibility
- Virtual teams, online collaboration, and distributed models of work
- Cross-cultural communication, globalization, outsourcing, translation, and localization
- Legal policies and social issues related to the information economy
- Media selection and multimodality
- The role of and perspectives on teaching and training within the information economy
- Content management, open source software, single sourcing, and XML

Proposal Submission Process and Submission Dates

Send 1-2 page (250-500 word) proposals to **IPCC2008 AT gmail.com** by the following dates:

- 15 October 2007 (deadline for submissions to be considered for early acceptance)
- 15 December 2007 (deadline for regular submissions)

For conference- or proposal-related questions contact: **IPCC2008 AT gmail.com**

International Journal of Design

International Journal of Design: Call for Papers

IEEE-PCS: Call for Articles

http://www.ijdesign.org

The *International Journal of Design* is a peer-reviewed, open-access journal devoted to publishing research papers in all fields of design.

Our vision is to publish high-quality design research, and to disseminate this research to the widest possible audience. Our Editorial Board consists of leading design researchers from all over the world, all of whom are contributing their valuable time and expertise to help establish a high standard for this journal. The journal is published both online and in print. The online version is open access, freely available for anyone, anywhere to download, read, distribute, and use, with proper attribution of authorship, for any non-commercial purpose. A printed version of the journal will also be available.

Submit your best work to the International Journal of Design!

Topics include:

- Social-Cultural Aspects of Design
- Globalization and Localization Approaches to Design
- Design Strategy and Management
- Ergonomics & Perceptions in Design
- Design Theories and Methodologies
- Computer Applications in Design

The first issue is now available.

Design Squad TV Seeks Projects

From Society Sentinel, 13 June 2007

The production crew for the PBS television series *Design Squad* is soliciting ideas for engineering projects that will appeal to their 9 to 12 year-old target audience. The IEEE provides funding for this series that soon will begin filming episodes for its second season.

The series follows two teams of high school students, mentored by professional engineers, as they compete to design and build a functional machine. The show's producers at WGHB, Boston, Massachussetts. are seeking projects that would be visually interesting, serve a client with a specific need, and provide the opportunity for multiple solutions. Past projects have included building a machine that makes pancakes and designing a summer sled for LL Bean.

Ideas for new shows may be emailed to the show's executive producer, Marisa Wolsky.

To learn more about Design Squad, visit http://pbskids.org/designsquad/.

IEEE-USA Seeks Articles for Today's Engineer

by George McClure

PCS has members who write clearly and well on various topics. We are looking for authors who would be willing to offer articles (750 to 1500 words) on writing tips, presentations, organizing proposals - even recasting résumés - or other topics that would be welcomed by our 16,000+ monthly readers.

Technology topics can be made interesting, too.

Contact: George McClure at g.mcclure@ieee.org.



Society: Non-Society Events

The following events are listed in chronological order with the earliest events first. This list is by no means exhaustive, but is intended to provide readers with information they may find helpful. It is updated each month.

CCNC 2008

Framemaker Chautauqua NEW!

RFID Conference 2008

WCNC 2008

ISPLC 2008 NEW!

CHI 2008 Agile Workshop

<u>NOMS 2008</u>

ICCSC 2008

SECON 2008

WM-SCI 2008

CITSA 2008

SIBIRCON NEW!

itSMF 2008 NEW!

CCNC 2008

Conference:	5th Annual IEEE Consumre Communications and Networking Conference 2008 (CCNC)
Dates:	10-12 January 2008
Location:	Harrah's, Las Vegas, NV USA
Proposals Due Date:	29 June 2007
Acceptance Date:	14 September 2007

IEEE/PCS News: Related Events

Final Paper Due Date:23 November 2007Website:http://www.ieee-ccnc.org/

IEEE Consumer Communications and Networking Conference, sponsored by IEEE Communications Society, is a major annual international conference organized with the objective of bringing together researchers, developers, and practitioners from academia and industry working in all areas of consumer communications and networking.

6 Technical Session Tracks

- Wireless Routing and Transport
- Network Access and Communications
- Multimedia Networking
- Communications and Info. Security
- P2P Networking and Content Distribution
- Emerging Technologies and Applications

Keynote Speaker is Dr. Henry Tirri, Research Fellow and Head of System Research Centers, Nokia Research.

FrameMaker Chautauqua

Website:	http://www.brightpathsolutions.com/reg.html
Location:	McKimmon Conference Center, Raleigh, NC
Dates:	14-15 February 2008
Conference:	Framemaker Chautauqua

This unique summit gathers FrameMaker users and experts together to discuss publishing industry advances and FrameMaker tool innovations. It is hosted by Bright Path Solutions.

Highlighting this year's program are keynote speakers, including RJ Jacques (Adobe Systems Inc.), Kent Taylor (acrolinx), Russ Ward (West Street Consulting), and Max Hoffmann (ENLASO).

Attendees have access to Adobe management and publishing technical strategists, education, and training on a wide variety of topics. These include sessions about comparing InDesign and FrameMaker, developing DITA for FrameMaker, supporting UNICODE in FrameMaker, converting between Microsoft Word and FrameMaker, translating content, working with CMS tools, and more.

Cost of the two-day event is \$595 US per attendee and group rates are available. Visit <u>http://www.brightpathsolutions.com/reg.html</u> for additional details or contact Bright Path Solutions at 1.919.244-8559 or email <u>info AT brightpathsolutions DOT com</u>.

```
IEEE/PCS News: Related Events
```

Adobe and FrameMaker are registered trademarks of Adobe Systems Incorporated in the United States and/or other countries. All other trademarks are the property of their respective owners.

RFID Conference 2008

Conference:	IEEE International Conference on RFID 2008
Dates:	17-19 March 2008
Location:	Las Vegas, NV USA
Proposals Due Date:	10 November 2007
Acceptance Date:	7 January 2007
Final Paper Due Date:	25 January 2008
Website:	http://www.ieee-rfid.org/2008/default.asp

IEEE RFID 2008 is the second annual conference dedicated to addressing the technical and policy challenges in the areas of radio frequency identification (RFID) technologies, their supporting large-scale distributed information systems, and their applications.

See the website for more information: http://www.ieee-rfid.org/2008/default.asp.

WCNC 2008

Conference:	IEEE Wireless Communications and Networking Conference
Dates:	31 March - 1 April 2008
Location:	Las Vegas, NV USA (co-located with CTIA)
Proposals Due Date:	1 September 2007 for tutorials 20 Septmber 2007 for papers/panels
Acceptance Date:	3 December 2007
Final Paper Due Date:	4 January 2008
Website:	http://www.ieee-wcnc.org/2008/

IEEE WCNC is the premier wireless event for wireless communications researchers, industry professionals, and academics interested in the latest development and design of wireless systems and networks. Sponsored by the IEEE Communications Society, IEEE WCNC has a long history of bringing together industry, academia, and regulatory bodies. In 2008, IEEE WCNC will be held in Las Vegas, Nevada, USA, co-located with CTIA WIRELESS 2008 (the world's largest wireless show). IEEE WCNC 2008 registrants will have free admission to the CTIA exhibit floor.

ISPLC 2008

Conference:	2008 IEEE International Symposium on Power-Line Communications and Its Applications (ISPLC 2008)
Dates:	2-4 April 2008
Location:	Ramada Plaza Jeju Hotel in Jeju Island, Korea
Website:	http://www.isplc2008.org/

```
IEEE/PCS News: Related Events
```

The symposium is centered on the general problem of communicating over power lines. It focuses on the latest technological advances in power line communications, as well as on current and future applications of power line communication systems. The goal of the symposium is to bring together academia, industry, and standardization organizations to stimulate research, development, and commercialization of all aspects of power line communication technology. The ISPLC 2008 is sponsored by the IEEE Communications Society, technically co-sponsored by the IEEE Power Engineering Society, and supported by Korea Information and Communications Society (KICS) and Korean Institute of Electrical Engineers (KIEE).

CHI 2008 Agile Workshop

Conference:	CHI 2008 Workshop: Optimizing Agile UCD
Dates:	5 April 2008
Location:	Florence, Italy
Website:	http://agileucd.editme.com/

The goal of this workshop is to improve future Agile user-centered design (UCD) experiences for User Experience (UX) practitioners (such as interaction designers, usability professionals, UI designers, etc.) by investigating best practices for Agile UCD.

To achieve this, senior UX practitioners with prior experience on an Agile project will share their knowledge and example work, collaborating in order to accomplish the following:

- Identify success factors for Agile UCD
- Find and remove obstacles that block Agile UCD
- Find opportunities that Agile projects give us
- Identify best UX practices for Agile UCD
- Identify UX skills that Agile projects need.

This workshop is a full-day extension to the successful Informal SIG of the same name at CHI 2007. What we'd like to happen this year is a more in-depth walkthrough of some examples of best practices, based on a few key areas of interest identified prior to the conference by the participants.

The results of this collaboration will be shared with the wider UX community (including those new to Agile development practices), but the participants should have experience in both UCD practices and Agile development.

Detailed guidelines for proposals are at the workshop website (<u>http://agileucd.editme.com/cfpchi2008</u>). Proposals should be no longer than 4 pages in length, and should be sent to Desirée Sy (<u>desiree DOT sy AT autodesk DOT com</u>). Any questions about the workshop can also be sent to Desirée Sy.

Participants will be notified by November 28th, and the topics for the workshop will be decided collectively by the group.

NOMS 2008

Conference:

IEEE/IFIP Network Operations and Management Symposium Pervasive Management for Ubiquitous Networks and Services IEEE/PCS News: Related Events

Dates:	7-11 April 2008
Location:	Salvador da Bahia, Brazil
Website:	http://www.ieee-noms.org/2008

Paper Submission Deadline Extended!

Held in even-numbered years, NOMS 2008 will follow the 20 years tradition of NOMS and IM as the primary forum for technical exchange of the research, standards, development, systems integration, service provider, and user communities. NOMS 2008 will present up-to-date approaches and technical solutions for integrated systems and services including communication networks, host systems, enterprise applications, service oriented architectures, and delivery of management services. The conference provides a peer-reviewed program of technical sessions, application sessions, software tools sessions, tutorials, BoF, posters, and panels as well as vendor exhibits.

ICCSC 2008

Conference:	International Conference on Circuits & Systems for Communications
Dates:	26-28 May 2008
Location:	Shanghai, China
Website:	http://www.ieee-iccsc.com/2008/

IEEE ICCSC 2008 offers an opportunity to learn about state of the art technologies and industry development for the multimedia wireless Internet of the near future. ICCSC 2008 welcomes researchers, developers and business managers in a varied program including both technical sessions and industry-oriented panels. Speakers will be both local figures and prominent individuals from around the world. The primary language of this conference is English, but some sessions will be conducted in Chinese.

SECON 2008

Website:	http://www.ieee-secon.org	
Final Paper Due Date:	4 April 2008 (Midnight Eastern Standard Time, GMT-5)	
Acceptance Date:	14 March 2008	
Proposals Due Date:	11 December 2007	
Location:	San Francisco Bay Area, California, USA	
Dates:	16-20 June 2008	
Conference:	Fifth Annual IEEE Communications Society Conference on Sensor, Mesh and Ad hoc Communications and Networks (SECON 2008)	

```
IEEE/PCS News: Related Events
```

IEEE SECON provides a forum to exchange ideas, techniques, and applications, discuss best practices, raise awareness, and share experiences among researchers, practitioners, standards developers and policy makers working in sensor, ad hoc, and mesh networks and systems.

The conference will provide collegiality and continuity in the discussions of the various topics among participants from the industrial, governmental and academic sectors.

Original technical papers on the communications, networking, applications, systems and algorithmic aspects of mesh and sensor networks, as well as those that describe practical deployment and implementation experiences are solicited for presentation and publication.

WM-SCI 2008

Conference:	12th World Multi-Conference on Systemics, Cybernetics and Informatics: WM-SCI '08	
Dates:	29 June - 2 July 2008	
Location:	Orlando, FL USA	
Proposals Due Date:	24 October 2007	
Acceptance Date:	28 November 2007	
Final Paper Due Date:	14 February 2008	
Website:	http://sciiis.org/WM-SCI08	

Submitted papers or extended abstracts will have three kinds of reviews: double-blind (by at least three reviewers), nonblind, and participative peer-to-peer reviews.

Authors of accepted papers who register for the conference can have access to the reviews made to their submission so they can improve the final version of their papers. Non-registered authors may not have access to the reviews of their respective submissions.

Awards will be granted to the best paper of those presented at each session. From these session's best papers, the best 10%-20% of the papers presented at the conference will be selected for their publication in Volume 6 of *JSCI Journal* (<u>www.</u> <u>iiisci.org/Journal/SCI</u>) and sent free to over 220 research libraries. Libraries of journal author's organizations will receive complimentary subscriptions of at least one volume (6 issues).

CITSA 2008

Conference:	5th International Conference on Cybernetics and Information Technologies, Systems and Applications	
Dates:	29 June - 2 July 2008	
Location:	Orlando, FL USA	
Proposals Due Date:	21 November 2007	
Acceptance Date:	21 January 2008	

IEEE/PCS News: Related Events

Final Paper Due Date:11 March 2008Website:http://www.infocybereng.org/citsa2008

CITSA 2008 is an International Multi-Conference being organized with the purpose of providing researchers, practitioners, developers, consultants, and end-users of computerized, communications and/or control systems and technologies, as well as their industrial and social applications in the private and the public sectors, an opportunity to join in a common place sharing experience and knowledge. It is intended to be a forum to expose and share current and future research work and innovations in these areas, as well as in the relationships among them.

One of the primary objectives of CITSA 2008 is to promote and encourage "interdisciplinary cross-fertilization", "epistemic things" and the production of "technical objects". Its intellectual perspective context is systemic thinking and practice, including the analogical thinking that characterizes the Systems Approach.

SIBIRCON 2008

Conference:	International Conference on "Computational Technologies in Electrical and Electronics Engineering"	
Dates:	21-25 July 2008	
Location:	Novosibirsk Scientific Centre, Novosibirsk, Russia	
Proposals Due:	1 March 2008	
Acceptance Date:	21 April 2008	
Final Paper Due:	16 May 2008	
Website:	http://sibircon2008.sibsutis.ru/	

Previously unpublished contributions from a broad range of topics in the sphere of the IEEE activities are solicited, including (but not limited to) the following areas:

- Coding theory
- Information theory
- Cryptography and data security
- Education and e-learning
- Microwave theory and techniques
- Energy conversion and renewable energy
- Telecommunications
- Engineering in medicine and biology

itSMF USA Fusion 2008

Conference:	Fusion 2008
Dates:	7-10 September 2008
Location:	San Francisco, CA USA
Website:	http://www.itsmfusion.com/

```
IEEE/PCS News: Related Events
```

As the fastest growing IT organization in the world, itSMF USA has the expertise necessary to unify IT service management by bringing together professionals and strategies to lead the industry toward a profitable future.

Attended by the industry's best minds and leading experts. Heightened opportunities for networking with fellow professionals, vendors, and implementation partners. Improved event planning with better organization, accommodations, and food. Expanded presentations from desirable speakers within the ITSM industry.

Conference summary

- Workshops: Sunday afternoon and Wednesday
- Exhibits: Sunday PM through Tuesday PM
- Conference: Monday through Wednesday
- Training: Thursday-Saturday (additional cost)



Guidelines

Newsletter Article Submission Guidelines

by Kit Brown

Submit articles by the **15th day of the month before publication**. The newsletter is published monthly around the 1st of the month. The <u>editorial schedule</u> provides the proposed themes for each month. Additional suggestions are always welcome.

For book and website reviews, see also the book and website review guidelines.

If you have questions, comments, or suggestions, please contact Kit Brown.

Copyright Statement:"The Newsletter is copyrighted as a whole and does not require authors to transfer their copyright ownership to the IEEE. Permission to copy without fee all or part of any material without a copyright notice is granted, provided that the copies are not made or distributed for commercial advantage and the title of this publication and its date appear on each copy. To copy material with a copyright notice requires specific permission; direct inquiries or requests to the copyright holder as indicated in the article."

Please do NOT submit articles as LaTEX files. They do not convert to HTML very well, and it's a major headache to ensure that text renders correctly. Also, turn off curly quotes if using Word. Acceptable file formats are .TXT, .DOC, and .RTF. Graphics can be .JPG, .GIF, or .PNG format.

Writing Tips: If you aren't sure how to construct the article, try using the 5-paragraph essay method. (Note: The 5-paragraph concept can be expanded to longer formats, so don't be overly literal about the five paragraphs.)

- 1. Identify your theme and 3 main points in the introductory paragraph. This lead paragraph should draw readers in and make them want to read on.
- Use each of the 3 body paragraphs to discuss the one of the 3 main points you identified in the first paragraph. (discuss them in the order that you listed them in the introduction). Show, don't tell. Give examples. If you express an opinion, back it up with evidence.
- 3. Summarize your thoughts in the conclusion paragraph and provide the reader with any actions that you want him/her to take. (The conclusion should not introduce new information, but should encapsulate what was said in the article and provide recommendations if appropriate.)

Guidelines: Please review the following information when submitting articles or regular columns to the newsletter:

• Submit articles electronically in MSWord or RTF format to <u>pcsnews.editor AT ieee.org</u>. These formats are more easily available to me than other word processing applications.

- **Provide articles that are 200-1000 words in length.** People tend to scan rather than read in an online environment. Short, well-written and relevant articles will be more beneficial to the audience than longer ones.
- **Provide a short bio** (~25 words) and contact information. Readers want to know about you. At a minimum, write a bio that tells your name, company, primary job title, email address and why this topic is of interest to you or what experience you have in the area you wrote about. (This doesn't count as part of your word count.)
- Indicate whether the article is time sensitive. Because of size considerations and editorial schedule, newsletter articles may not be published immediately upon submission, unless it is date critical (e.g., information about the upcoming conference or an article about a current event that relates to technical communication.)
- **Indicate copyright information if applicable.** If you own the copyright for an article, indicate this with your submission so that we can provide appropriate attribution. If you don't own the copyright, but think an article is interesting, provide the article, along with the contact information for the copyright holder and the name of the publication where it was originally published.
- Insert the URL into the text so that I can easily create the link. For example, if you want to reference the w3c, you would say "refer to the W3C (http://www.w3c.org) guidelines". Don't create the hyperlink in Word.
- **Provide complete bibliographic information for references.** Include author(s), title, date of publication, publisher, page numbers or URL, ISBN number.
- Use a friendly, casual tone. We want to invite people to read and to make the information as accessible as possible.
- Use 1-inch (2.54 cm) margins; don't indent paragraphs. I have to reformat the text so it's better to minimize the formatting you include. Instead of indenting, put an extra line between paragraphs
- Avoid using lots of formatting within the text. I will have to format the articles for the online environment, so don't put lots of bold and italic in the text.
- Use subheadings generously. Subheadings help the reader identify the information that is important to them. Subheads are especially helpful in orienting the reader in the online environment.
- Use active voice and short sentences. At least 40% of our audience is outside of N. America. For many members, English is their second (or third) language. Short sentences and active voice are easier to absorb and understand than complex sentence structures.
- Avoid jargon and "big" words when a simpler term will work. Approximately 90% of our audience is engineers who need to write effectively on the job. Avoid using writer's jargon, or explain the term in the context. By "big" words, I mean complicated, less commonly used words that may have the same or similar meaning to other, more commonly used words (e.g., instead of "obfuscate", just say "confuse").
- Avoid idioms. Idiomatic phrases are those colorful sayings we use to mean something else. For example, "once in a blue moon", "jump right in", "on the fly". Unfortunately, these sayings often have no equivalent in other languages, and can be difficult for non-native English speakers to interpret.
- Submit graphics as JPGs or GIFs. Web graphics need to be in one of these formats for most browsers. SVGs and PNGs are not yet universally accepted. If you want graphics included in your article, you need to give me the JPG. Don't just embed it in Word.



Guidelines

Editorial Schedule for 2007

by Kit Brown

The following table shows the proposed themes for each issue through the year. If something particularly timely occurs during the year, these themes may change.

If you have questions, comments, or suggestions, please contact Kit Brown.

Web 2.0

Editorial Schedule for 2008

Month	Theme
November	International Communication
December	Standards
January 2008	Trends
February	Web 2.0
March	Proposals/Business Cases
April	Agile Documentation/ Writing Requirements
May	Project Management
June	User-Centered Design
July/August	Information Economy
September	International TC
October	Reports and White Papers
November	Information Architecture
December	Presentations



Guidelines

Book and Website Review Guidelines

by Kit brown

Have you read a good book lately? Found a website you can't wait to tell people about? Here's your chance to share your newfound knowledge with your colleagues.

Here are some hints for constructing the review:

- 1. Include the complete bibliographic information for the book or website immediately after your byline. For example: *Now, Discover Your Strengths by Marcus Buckingham and Donald O. Clifton. 2001. The Free Press: New York. pp.260. ISBN: 0-7432-0114-0. URL: <u>http://www.strengthsfinder.com</u>*
- 2. In 2-3 sentences, tell the reader what the book or website is about and how it relates to technical communication.
- 3. Provide 2-3 things you got out of the book or website, and if applicable, 2-3 things that you wish they had done differently. Opinions are OK if they are supported
- 4. Support your opinions using specific examples from the book or website. This analysis should be brief--1-2 paragraphs at most.
- 5. Conclude with a recommendation of how this information might be useful to the user.

The reviews should meet the following guidelines:

- Keep it short. The reviews should be 300-500 words. A couple of paragraphs can tell the reader a great deal about what the book/website is about and why one should read it.
- Focus on the big picture. In a short review, there isn't room to go page by page and analyze every detail. Instead, pick out the main themes and write about the overall impression. This style is much more interesting to read.
- Use an informal, conversational tone. Pretend you are talking to someone about the book or website, and that you only have one minute to explain it to them. What would you tell them about it?
- **Review the article guidelines.** These guidelines provide more detail about the grammar and style for presenting the information, as well as the format the editor needs to receive the information in.