SIGDOC Reminiscences

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In the few short years that I have been connected with SIGDOC, the world of the technical communicator has changed quite a bit. These changes are visible in several major areas: in the work itself, in the technology and tools that the communicator uses, in the technologies about which they create information, in the work environment, and in the culture in which they operate.

The Work Itself

The basic craft of the technical communicator has changed very little. The requirements that the technical communicator have mastery of language, excellent analytical skills, and think and write with clarity have not changed, unless to require greater levels of precision. But the craft of this discipline is more than these basics. Evaluating, designing, structuring, editing, creating effective, even outstanding, technical information requires experience, understanding of audience, judgment, planning, and perspective on the part of the technical communicator. Good editing and indexing remain part of the foundation of the practitioner. They must also have a sound understanding of the work process so that the information they so carefully design and create is delivered at the right time (that is, on schedule) in the right form (in accordance with their deliverables). There is no point in producing a top-notch manual that arrives two weeks after the software has shipped!

Technology has helped to make many steps in this process faster and the result more pleasingly formatted than those large manuals printed from a typewriter master we saw two decades ago. And it is amazing how important a simple format improvement can be to the reader. Nicely sized headings and captions can make a huge difference in how easy a document is to use, and people are very visually oriented. How many of us remember the diagram in the book rather than the three words that described it? or the color and size of a book rather than its exact title?

Thus the steps may be quicker, but we pretty much still have to go through all of them, from research, understanding, planning, writing, reworking, to delivery. The main thing that technology has helped with is new capabilities for formatting, and new formats entirely. For example, it is now possible to use animation, sound and video with technical information, technologies that were unused two decades ago. With these new possibilities, come new requirements on the technical communicator: must they learn script writing, animation tools, and video editing as well as the basic skills? For some, the answer will be yes, even with eagerness; for others, they will decide that such new areas take them too far from the work they enjoy.

Research in the field has been slow to come to maturity, but the discipline is beginning to reap rewards in our understandings of how people interact with computers, and what are preferred and less valid ways of presenting material. Experiments with different ways to deliver information and training materials to target audiences are still in their infancy, but some researchers are finding approaches that may prove fruitful. Research on learning styles has shown that there are more than we suspected, and the impact of new technologies is under constant evaluation. We have learned from the movie industry how to use a narrative approach for effective presentation, and from the cartoon segment of this industry of ways to exploit animation where appropriate.

The Tools and Technology

Every year, perhaps even every month or so, during this period, tools and delivery types appear, go away, or change. In the 1970s, lots of technical information was written in longhand or on a typewriter, and it was considered a tremendous advance when early word processing systems and typesetters came along. They recorded on tape, a notoriously difficult medium as its access is sequential, not random, and it was years before addressable disks became the more common medium.

Over time, dedicated word processing systems gave way to computers that had word processing software, and an author moved from handing over a manuscript to a typist to using the keyboard to write a piece and make changes to it. No one who used a computer-based system did not laud the ease of making changes with this means, particularly if they had ever used typewriter and cut-and-paste (literally). As computers and networking became more common and eventually, at least in some parts of the world, ubiquitous, the trend was to electronic and online delivery. This became increasingly the delivery means of choice. The existence of the internet does not mean we won't have any more books they will be around for a long time. But it does mean that we have found that volatile information is often best delivered online, and the quickness and ease of changing online display dictates that this is the way to go for information that has a short lifetime.

What has this meant to the technical communicator? It

has meant that in addition to learning all the rules, practices, and craft of writing, organization, rhetoric, and technology, the technical communicator must always be on the lookout for new tools, new media, and new requirements. Not least among these are tools for organizing and imposing hierarchy on sets of documents, and tools or source formats that can deliver on the single-source promise. Complex customer environments can require multiple delivery formats, and it is a rare tool that can meet all these needs. But the technical communicator often prefers to work more on content than on learning tools, so changing technology imposes a significant conflict to the practitioner.

We've seen the trend from verbose, massive printed manuals, to minimalism and the push for putting everything online. Certainly electronic formats win out when it comes to color and animated features, but many people continue to like a handy book for learning. Reference material, however, can be very effective in an online format. Though it took us a while to understand why, it is still easier to read a well-formatted printed book than an online book, as the screen display today does not have the resolution of the printed page. Eventually, when expensive displays become more inexpensive, more and more material will be available exclusively in the online format.

The role of the technical communicator has also significantly expanded to include evaluation and sometimes creation of graphics, course materials, interactive tutorials, marketing material (both printed and online forms), user interface design, usability studies, script writing, video display, and others. The technical communicator must be aware of the needs of their audience, and be sufficiently trained and experienced to know what methods will work best for the target audience. And part of the work of every technical communicator is being aware of new tools and learning the ones most suited to the needs of their projects. This will never change.

The Work Environment

The work environment of the technical communicator has also changed in recent years. Many jobs in the earlier days of the technological revolution were at large companies where writers worked in large teams. There were often separate technical writing and instructional design or curriculum development groups. Roughly eight years ago, several companies decided to merge these groups, and a whole new culture developed from these organizational changes. Some of these cases have been described in other issues of this journal and in proceedings from SIGDOC and other conferences.

Another significant change in the work environment of the technical communicator has been the shift to tele-commuting and working from home. Ten years ago, working remotely was rare for the technical communicator, though there were many teams that had members who worked at distant locations and only occasionally traveled to meet face-to-face with other team members. But today this is increasingly common, and world-wide teams pose new logistical problems, as they have to deal with the bane of multiple time zones: my colleague is on the west coast - do I call in the morning or afternoon? Or: my colleague is in Europe same question. Or: my colleague is in Singapore: when is a mutually convenient time to call? (The answer to this one is: use email and call only when all else fails.) With increasingly common worldwide teams, such issues are more frequent than in the past.

Working from home a decade ago was uncommon; today many employers with technical communicators have recognized that their value is so important to the corporation or institution that accommodating a flexible workplace benefits both. Employees can sometimes work from home, sometimes on equipment loaned from the employer. This has added complexity to the work of the technical communicator, particularly if there are children at home, which has often been a good reason for a technical communicator to prefer the flexible workplace, for it means that home interruptions and distractions can often pose tricky time management problems. The availability of many forms of electronic communication from phones and FAXes, as well as email and electronic transmission of deliverables has additionally facilitated and encouraged this new environment. Some of these changes have been reflected in research papers that address such changes in our profession.

Changes in employer perspectives and practices such as globalization have meant that significant numbers of employees have been downsized, let go, laid off, or have otherwise left permanent positions. One result has been an increase in those who work as contractors, freelance contributors, or independent consultants. This has changed how their work is done, and often what kind of deliverable an employer decides is most cost effective.

The New Technologies

When "The Graduate" came out some decades ago, the watchword was *plastics*. That was the new technology of the time, at least for some portion of the population and the world of work and business. Then we passed into the period when the computer became the focus of business and work. For many, as computers expand into the world of the internet, miniaturized technology (hand-helds, mobile phones, and so on), computers remain their technological focus. The tiny screens present a unique challenge for delivery of any form of information.

At present, bioengineering is rising rapidly, with its concomitant industries of agribusiness, pharmaceuticals, and medicine. With each new level of technology, for technical communicators to become proficient at creating materials that describe, teach, or elaborate on it, they must learn the new area, become expert at some phase or part of it, and master the terminology and the basics. In one respect, this makes every technical communicator a lifetime learner. In another, where a technology is sufficiently complex to require years of training, it presents a significant challenge for the technical communicator to remain current. This aspect of the working life of the technical communicator is not likely to change any time soon.

The Culture of Work

The culture of the work environment is also shifting, though not so rapidly as the technology with which we work. Part of the cultural shift is that we work increasingly with a more diverse population. This includes, at least in the United States, more people from other countries, both at US locations and through distant interaction, and more people from minority groups that have not so far been well represented in our community. We have a very long way to go to find a more equitable distribution, but there are small positive steps in this direction.

This increased cultural diversity brings with it an increased need for language skills, for in many cases team members with whom we work know English as a second language. This adds new challenges for the technical communicator because they may be asked to help clarify points, edit documents, or perhaps just sit in on audio conference calls to repeat questions so that everyone has heard the question from someone who is a native speaker. Often a participant who knows English as a second language is familiar with the pronunciation first learned (British English, for example) but has difficulty understanding American English speech, and even more difficulty understanding the speech of a non-native speaker who speaks with a strong accent. All these present new challenges and heighten our awareness of cultural differences that are constantly shifting. This area is still poorly understood and rarely documented, but may perhaps soon become grist for the technical communicator's research mill.

The world of a global television medium is also changing our cultural perspectives, and to a much smaller extent, the world of the internet is also changing it. Television as entertainment has had an enormous effect on our every day lives, and has meant that at some level technical communicators must be perceived as entertainers who produce information that the user will want to look at. If it's not attractively or strikingly packaged, it won't be used. Note the amazing success of the series of books "for Dummies"! A decade ago few technically proficient people would look at a book labeled "for Dummies" as, quite rightly, they did not think of themselves as dumb. But apparently enough people found this a catchy kind of title and bought such books in large quantities.

Fifteen years or so ago, technical people were happy to find the information they needed in large format (8.5x11 inch) printed manuals; today they expect smaller, more attractive, handier, books and lots of information searchable online. Much of this is the outgrowth of the desire to find information fast, and without preliminaries. Some of this has also been driven by the extraordinarily rapid change of technology, which has meant that the technical communicator is at some level always playing catch-up.

New technologies with miniature screens have also presented special challenges to the technical communicator. Devices must be so intuitive that they need no separate documentation. This has lead to the spawning of an entirely new profession that can still be considered part of the technical communications world: that of the usability engineer or user interface designer. Research in psychology and cognition become increasingly important as we design and implement devices to be used, for example, by emergency response personnel such as nurses, or by people accessing time-critical information from their mobile phones. Meeting the needs of these challenging environments presents us with problems not seen in earlier contexts.

Finally, one area in which there has been significant change is the perception of the technical communicator as team member. This should be good news for most. Perhaps two decades ago, the technical communicator was called a writer or technical writer and in many environments appeared to be a second class citizen, with lower salary, less management clout, and less respect than the engineers or scientists with whom they worked. The ubiquitous headhunter did not even consider the expertise a profession and few placement agencies would work with a technical communicator seeking a new job. This was true whether the technical communicator was a man or a woman. While this perception remains true in some areas, there has been a great increase in the number of agencies looking for technical communicators to place, and in many environments the information developers and engineers are on a par, or at least more closely compensated. Thanks to the activities and professionalism of thousands of practitioners and academicians, the profession is soundly rooted and growing.

SIGDOC has been proud to participate in the growth of this discipline, and as Chair I have been privileged to work with an outstanding Executive Board. Their energetic work and enthusiastic support of programs and initiatives have made SIGDOC the viable institution that it is, and their broad range of interests and activities have helped make both our journal and our conference leaders in the field.

Our SIGDOC journal, as so pleasantly described by Joe Rigo in his contribution to this issue, began as a small newsletter, and is now an ACM journal, the ACM Journal of Computer Documentation, with full academic credentials. We are the first SIG to have had such a successful Newsletter that our petition to ACM to make it a regular ACM Journal was immediately accepted. Its issues are in the ACM Digital Library, and it is indexed in national and international services. It is the only ACM journal or transactions not only to have all articles peer-reviewed, but to publish commentary on articles, a level of academic scrutiny far beyond that of other publications. This major success for our SIG and the profession was largely due to the efforts of our long-time Editor in Chief, T.R. Girill, and the Production Editor, Susan Jones. They were supported in their activities by a sterling Editorial Board who have made and continue to make many contributions. At the time

when our *JCD became the ACM Journal of Computer Documentation, we started an electronic SIGDOC Newsletter to carry short pieces of topical interest to the membership, jobs, and notes from the Executive Board. This Newsletter remains the place for short pieces that may provoke electronic response from individual members. SIGDOC has come a long way from its modest beginnings, and I see many successful conferences in our future and breakthrough research published in our distinguished journal.

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