STC

November 2011
*Volume 58 Number 4*

# Technical COMMUNICATION

*Journal of the Society for Technical Communication*


# SPECIAL ISSUE

## PROFESSIONALIZATION OF TECHNICAL COMMUNICATION: ZEITGEIST FOR OUR AGE (PART I)

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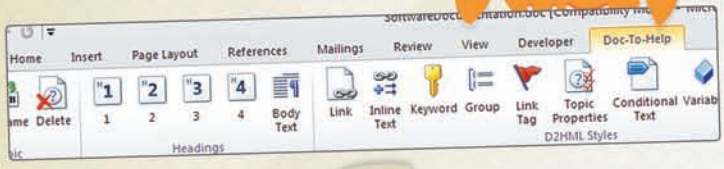


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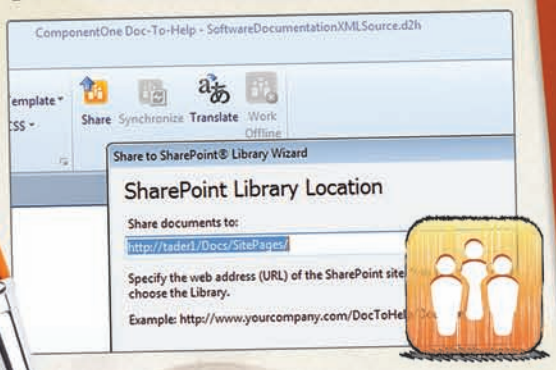


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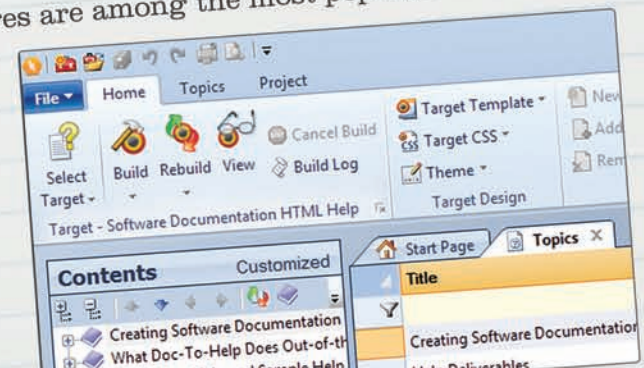


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The Society for Technical Communication is the largest association of technical communicators in the world. STC is currently classifying the Body of Knowledge for the field and communicating the value of technical communication. Its volunteer leadership continues to work with government bodies and standards organizations to increase awareness and accurate perception of technical communication. Membership is open to all with an interest in technical communication. Visit the STC Web site (www.stc.org) for details on membership categories, fees, and benefits.

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VOLUME 58, NUMBER 4
**November 2011**
*ISSN 0049-3155*

# Technical COMMUNICATION

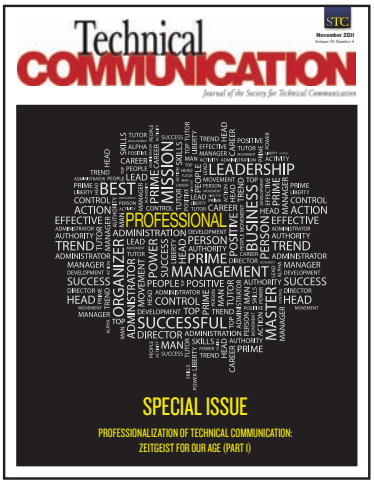
*Journal of the Society for Technical Communication*

**NOVEMBER 2011**

## Special Issue: Professionalization of Technical Communication: Zeitgeist for Our Age (Part 1)

## ARTICLES



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## About the Journal

*Technical Communication* is a peer-reviewed, quarterly journal published by the Society for Technical Communication (STC). It is aimed at an audience of technical communication practitioners and academics. The journal's goal is to contribute to the body of knowledge of the field of technical communication from a multidisciplinary perspective, with special emphasis on the combination of academic rigor and practical relevance.

*Technical Communication* publishes articles in five categories:

- **Applied research** – reports of practically relevant (empirical or analytical) research
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The purpose of *Technical Communication* is to inform, not impress. Write in a clear, informal style, avoiding jargon and acronyms. Use the first person and active voice. Avoid language that might be considered sexist, and write with the journal's international audience in mind.

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# Professionalization of Technical Communication: Zeitgeist for Our Age Introduction to This Special Issue (Part 1)

Nancy W. Coppola


## Abstract

**Purpose**: To trace the contemporary currents of professionalization for technical communication and our watershed initiatives in recent history.

**Methods**: Analysis of literature, including social media, and conversations with our thought leaders.

**Results**: Two of the three established processes for professional identity are described; the third process will take shape in the next issue of *Technical Communication.*

**Conclusions**: We have emerging paradigms for the body of knowledge, evolving consensus on core competencies, and economic markers of disciplinary status.


**Keywords**: professionalization, core competencies, body of knowledge, disciplinary status

## Practitioner's Takeaway:

- There are two online resources for information that constitute the body of knowledge for our profession.
- The integrated combinations of knowledge and skills valued by practitioners are similar to the core competencies of academics.
- Professional status for practitioners and disciplinary status for academics show comparable struggle and advancement.

In the mode of an intellectual throw-down, Gerald Savage, in 2003, emphatically exclaimed that the technical communication field lacks the status, legitimacy, and power of mature professions. He chided practitioners and academics alike for our identity crisis: "We cannot be recognized by others if we can't even recognize ourselves (Kynell-Hunt &Savage, 2003, p.1). Both volumes of *Power and Legitimacy in Technical Communication*, edited by Kynell-Hunt and Savage, show that professions emerge in processes of struggle for market control and closure, their members seeking definition of a coherent body of knowledge and pursuing development of a professional history that will provide a unifying identity (Kynell-Hunt & Savage, 2003, 2004). These ideological, economic, and political processes for professional identity are already in play for technical communication, but are we there yet? Or, in this changing, contingent, and globalized world, have we already bypassed the traditional notion of profession to arrive at an entirely different view of contemporary professionalization?

This special issue of *Technical Communication* addresses those questions in the first collected, multiple-author response to professional status since that seminal two-volume collection edited by Kynell-Hunt and Savage. This introduction will look at the ascent of professionalization in the past decade and map advancements to the cultural and economic framework of today. We break from voices of the past in the lack of heraldic pronouncements of professional status; nor do we call for a reshaping, remapping, reconfiguring, revising, or rethinking our field. As Rude (2009) notes, the prefix *re* implies dissatisfaction and the idea that we need, somehow, to be modified.

# Professionalization of Technical Communication

Rather, we find much to be satisfied about, evident in many of the activities in our field described in this introduction: emerging paradigms for the body of knowledge, evolving consensus on core competencies, and mediating disciplinary status. These are the first two processes for professional identity in play for technical communication—ideological and economic. Important political processes will be described in the next issue of *Technical Communication*, the second part of our special issue on professionalization.

## Emerging Paradigms for the Body of Knowledge

We might begin with the bedrock of professional issues: our underlying disciplinary body of knowledge. STC President Hillary Hart (2011) claimed the body of knowledge as a presidential goal for 2011–2012, describing it as framing out the multiplicity of skills, concepts, and knowledge—areas that enable technical communicators to contribute so effectively to business, government, and the public good. Johndan Johnson-Eilola and Stuart Selber (2004) boldly declared that our field will not achieve the status of a mature profession until it can come to grips with a coherent body of disciplinary knowledge. They provide a foundation for our body of knowledge in the landmark volume *Central Works in Technical Communication,* a collection of influential articles and best work that encompasses complex theoretical topics, research methods, and social issues. Their work, dedicated to the theory that underlies scholarly research and common professional practices, comes closest to what we might call a canon of literature for technical communication. Contrast this iconic work with another way to imprint core knowledge on those who would claim competency as a technical communicator: the DSST (DANTES Subject Standardized Test) in Technical Writing. The DSST, which enables schools to award credit to students for knowledge equivalent to that learned by taking a college course in technical writing, covers knowledge of basic facts and terms, understanding of concepts and principles, and the ability to apply knowledge to specific problems and situations—all in a 2-hour multiple-choice test. Although these are wildly different forms of knowledge frameworks, the contrast points up the complexity of developing a unique core knowledge base for technical communication.

And then there is the capitalization issue. The initial capitalization form—Body of Knowledge—represents the formal document the professional associations call by that title. Think of the *PMBOK © Guide*, the global standards published by the Project Management Institute that provide guidelines, rules, and characteristics for project management. The lowercase form—body of knowledge—refers to the collected set of resources published by the associations to represent guidance on knowledge in their field (Morris, Crawford, Hodgson, Shepherd, & Thomas, 2006). Fortunately, we have two emerging paradigms for defining a technical communication body of knowledge: the EServer TC Library and the STC Body of Knowledge Portal (TCBOK). The TC Library proclaims that it is "the single most comprehensive technical communication body of knowledge in the world" ("About this Site: EServer TC Library," 2011). The TCBOK hedges its claim by acknowledging that "the team is not creating a body of knowledge for the TC profession, but rather attempting to organize, make accessible, and connect together the plethora of information necessary to train for and practice within the profession" ("Body of Knowledge – experimental wiki – About the STC TCBOK project," 2010). To accomplish this, the team created the architecture for a web-based portal to provide access to a TC BOK more emerging than known.

However, these are paradigms built from different hermeneutic approaches, as TC Library creator Geoffrey Sauer and TCBOK founding task force member David Dayton stated in their ATTW 2010 conference panel "Bodies of Knowledge for Technical Communication: Paradigms and Possibilities." Sauer (2010) described the TC Library development as inductive, with content sorted into 12 categories and tagged with metadata such as author, language, publication, and year. A tag cloud visually represents the relative prominence of the library's content, which is determined by the number of works added by its contributors. The TCBOK portal was developed deductively, according to Dayton, with content categories culled from peer-reviewed literature and then hierarchically arranged through group affinity diagramming. The initial framework for the high-level taxonomy was validated by the STC membership at conferences and through surveys. Carolyn Rude, the

panel respondent, identified common elements of the two knowledge-gathering efforts: (1) practitioner bias, in which the taxonomies favor workplace outcomes and do not address important research questions; (2) identity, or making clear who we are and what we know; (3) academic-industry relations, or helping to breach this divide by including work of both academics and practitioners; and (4) foregrounding knowledge, or making knowledge more important than the functions performed.

Favoring outcomes over function in defining a body of knowledge helps professions evolve, according to the Change Management Solutions (2008) report to STC. Its review of 10 emerging professions found that bodies of knowledge defined *objectively* (by a defined outcome) were more successful that those defined *functionally* (by the processes and functions performed). The consultants found that the development of the body of knowledge must be market driven and positioned to address the problems of the end-user, not the techniques of the practitioner; outcome-defined professions tend to be more responsive to changes in customer/client needs, business environments, and technological advances. They also more readily absorb new practices and practitioners, rather than competing with them (Change Management Solutions 2008, p. 27).

How successful are our body of knowledge efforts today? If we measure success by frequency of use, then surely we would call the TC Library successful. With 17,000-plus visitors and 100,000 hits a day, the open-access website "is the most popular technical communication website in the world" (Johnson, 2008). The TC Library links to more than 20,000 works, only 10% of which are peer-reviewed, so that its users—professional, scientific, and technical communicators—may browse content located elsewhere. If we measure success as user design for multiple stakeholders and their needs, then we would call the TCBOK a success. With 14 personas and their detailed tasks and scenarios created for the site, the portal "has the potential to be much more than a means for technical communicators to stay up to date. …[it] can serve many other kinds of people—from students looking to enter the field to business executives trying to understand what technical communication is about" (Minson, 2009). The TC Library continues its rapid growth in both usage and content development. Since I chronicled its development as an early task member, the TCBOK (2010) has paused for reflection. As a collaborative wiki, the platform provides only a raw development site without the user interface of a finished Web site. After the initial flurry of activity, content population has flattened. An upcoming STC Webinar hopes to capture and inspire academics to use the portal for student projects in developing content and moving this initiative forward.

## Toward Consensus on Core Competencies

As practitioners in an applied field, we manifest our professional knowledge as core competencies. Although we do not yet have a collection of empirically based and nationally recognized core competencies, we are moving toward consensus on knowledge and skills necessary for success. Recent research explores and theorizes disciplinary competencies as well as mediates them in new arenas. In our assessment research at New Jersey Institute of Technology (NJIT), we have defined core competencies as those integrated combinations of knowledge and skills that allow evidence-based demonstration of professional accomplishment to stakeholders of our field.

Our literature gives us various taxonomies of core competencies for technical communicators. We have access to a deep sense of practitioner knowledge (Davis et al., 2003; Harner, Johnson, Rainey, & Rude, 2003; Hayhoe, 2002; Turner & Rainey, 2004), as well as survey data (Dayton & Bernhardt, 2004; Whiteside, 2003) and categorized bibliographic information (Alred, 2003; Smith, 2004). Others have described professional roles that are enabled by our core competencies. Saul Carliner (2001) detailed a long list of core competencies for technical communicators as information designers, Corey Wick (2000) enumerated core competencies that enable technical communicators to lead in knowledge management, and William Hart-Davidson (2001) interpreted our core competencies for playing a role in information technology systems.

All to what end? In our research at NJIT, we identified core competencies through literature review, particularized them by faculty and advisory board for local context, and assessed them as student outcomes in ePortfolios. In 2009, we completed nine instances of portfolio assessment over 5 years, confirming the

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validation efforts to establish core competencies through ePortfolio review. Supported by a research grant from the Council for Programs in Technical and Scientific Communication (CPTSC), we partnered with faculty of the graduate program in technical communication at Texas Tech University (TTU) to field test, share assessment strategies, and work toward a common set of core competencies (Coppola & Elliot, 2007). The two teams were able to find a collaborative set of core competencies for our programs, shown as a data point in Table 1 of comparative competencies (Coppola, Elliot, Barker, Carter, & Kimball, 2007). Although small, this pilot project validated our claim that a community of researchers could collect localized competency sets that respond to their programs' curricular initiatives and school missions (Coppola & Elliot, 2010). A current CPTSC Program Assessment and Review initiative, led by Thomas Barker, reports outcomes and assessment methods of 27 technical communication programs. The CPTSC Outcomes Survey (Barker, 2011) was administered to program directors and administrators listed in the CPTSC academic database to determine programmatic outcomes and methods of creating and reviewing outcomes. Their snapshot of sets of program outcomes provides a data point for Table 1. Each program strives for a desired end: a set of variables that, when taken together, will serve as the core competencies of our field.

If assessment of program outcomes allows evidence-based demonstration of professional accomplishment to the academic stakeholders of our field, how do we determine whether our core competencies align with those of the professional stakeholders? Kenneth Rainey, Roy Turner, and David Dayton (2005) answered that question by surveying 67 technical communication managers to learn which core competencies they seek in new hires. The authors first identified a comprehensive list of competencies valued by academics through content analysis of 156 course descriptions from the 10 top undergraduate programs in technical and professional communication in the United States. Dayton's follow-up interview with three of the surveyed technical communication managers both contextualized and corroborated the survey data. The core competencies most important to those who hire our graduates are also represented as a data point in Table 1.

How do we know that these core competencies are truly ours? Corporate strategists C. K. Prahalad and Gary Hamel (1990) give us four characteristics to test. Core competencies are unique skills that (1) provide a significant source of competitive differentiation, (2) transcend a single market, (3) make a significant contribution to the perceived customer benefits of the end product, and (4) are not easily imitated. The authors use an elegant metaphor that is as appropriate to technical communication as it is to a corporation: The diversified corporation is a large tree. The trunk and major limbs are core products, the smaller branches are business units; the leaves, flowers, and fruits are end products. The root system that provides nourishment, sustenance, and stability is the core competence. You can miss the strength of competitors by looking only at their end products, in the same way you miss the strength of a tree if you look only at its leaves. (Prahalad & Hamel, 1990, p. 82)

We are reminded here that our core competencies are not defined by the end products we produce but by our demonstrable knowledge and skills. And we recognize that technical communication is as much about craft knowledge as codified knowledge, often tacit as well as explicit.

How might we think about writing, then? Is writing knowledge of the game (a prerequisite to getting into the casino), or table stakes (capabilities that are crucial for survival but do not confer any specific differential advantage over other competitors in that industry)? Or is writing the casino itself, a core competency that is not easily imitated anywhere else on the strip? When particularized as writing for a specific audience directed by clearly defined purposes, writing takes its rightful place as a core skill for our profession.

The newly formed STC Certification Commission (STCC) (*STCC Candidate Instructions for STC Certification*, 2011) identified broad areas of practice that represent the major activities performed by technical communicators. The committee, led by past Society President Michael Hughes, validated these areas of practice against (1) the new job description of technical writing given in the U.S. Bureau of Labor Statistics (BLS) *Occupational Outlook Handbook*, (2) the International Standards Organization technical writing standard (ISO26514), and (3) more than 40 help-wanted ads from various locations in the

United States and Canada. The results showed strong agreement between the areas of practice and what these sources consider the major elements of technical communication. The certified practitioner demonstrates proficiency in the following areas:

- User, Task, and Experience Analysis—Define the users of the information and analyze the tasks that the information must support.
- Information Design—Plan information deliverables to support task requirements. Specify and design the organization, presentation, distribution, and archival process for each deliverable.
- Process Management—Plan the deliverables schedule and monitor the process of fulfillment.
- Information Development—Author content in conformance with the design plan, through an iterative process of creation, review, and revision.
- Information Production—Assemble developed content into required deliverables that conform to all design, compliance, and production guidelines. Publish, deliver, and archive.

For actual demonstration, however, the areas of practice are broken down into nine areas called "competencies," shown as a data point in Table 1.

The table shows the key integrated skill sets identified by certification, managers' expectations, program outcomes, and cross-college portfolio assessment. It has not been reorganized to highlight commonalities, but it quickly shows that the competencies cross-reference among the four sources. Semantic differences account for some variation; academics might talk of "rhetorical situation," while managers might speak to "analysis of users' needs." "Ethics" figures prominently in academic responses (columns 2 and 4) but seems absent from those of professionals (1 and 3). However, Rainey and colleagues (2005) (column 3) recognized the omission and state that "the ability to observe ethical and legal obligations" was an important identified skill but that it was not easily categorized in their main sections. And the certification application of STCC (column 1) requires that candidates abide by a code of professional conduct promising integrity and honesty. "Research" was not high on the list of competencies sought by managers, but they did find field-testing a manual and conducting

**Table 1. Comparison of Competencies from Professional and Academic Sources**

| Cross-institutional assessment[1] | Programmatic outcomes[2] | Managers' expectations[3] | STCC[4] |
|---|---|---|---|
| Balance of theoretical knowledge and practical skills | Document design | Collaboration with subject-matter experts | Project planning |
| User-centered design | Rhetorical situation | Collaboration with coworkers | Project analysis |
| Rhetorical awareness | Team | Analysis of users' needs | Solution design |
| Writing and editing | Research | Assessment of/ability to learn to use technology | Organizational design |
| Professionalism | Ethics | Document design and word-processing applications | Written communication |
| Ethical and multicultural practice | Genres | Self-motivation and evaluation | Visual communication |
| Facility with multiple technologies | Visual | Evaluation of own work | Content development |
| | Theory and practice | | Content management |
| | Audience analysis | | Final production |

[1] Combined Core Competencies: NJIT and TTU 3/15/07 (Coppola & Elliot, 2007)
[2] Programmatic Outcomes (Barker, 2011)
[3] Top Competencies ranked as important by managers (Rainey et al., 2005)
[4] Candidate Instructions for STC Certification, Version 1.0, June 1, 2011

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secondary research useful. And STCC's Solution Design Competency asks the candidate to demonstrate the ability to design high-level solutions for implementing information products, showing research methodology and synthesis of research results into an overall design solution. The takeaway from this exercise is that practitioners and academics are not that far apart when we talk about core competencies.

## Mediating Disciplinary Status

Achieving disciplinary status for technical communication practitioners and academics has enormous economic importance for us. Practitioners define the business environment and economic value for our field; academics compete for critical resources and stakeholder status in their specific institutional sites with the coins of their realm: teaching, research, and service.

Disciplinary status is closely aligned with professional status. Sociologists tell us that the concept of professionalization yields information about the way work is organized under a common educational identity, the kind of memberships that occur in professional organizations, and the nature of the emergent shared work culture (Evetts, 2011). For practicing professionals, STC has worked hard to provide authoritative differentiation. In 2010, work with the BLS resulted in a separate chapter for technical writers in the *Occupation Outlook Handbook*, an essential reference document for corporations. This means that for the first time the BLS has acknowledged technical writers as distinct from other writers, a critical boundary for our autonomy.

A common educational identity for academics requires a different negotiation of space, but it does not appear that our campuses are as well differentiated as our corporations. Our disciplinary status on the nation's campuses has been as storied and hard won as our status of practicing professionals. Before 2010, the Classification Code for Instructional Programs in the United States, which is used to report institutional data to the Integrated Postsecondary Educational Data System, included two almost identical codes for technical communication: Technical and Business Writing and Technical and Scientific Communication. These codes differentiated the focus of our academic programs on the genres we produce rather than recognizing common knowledge, actions, and ideas. The Consortium of Doctoral Programs in Rhetoric and Composition successfully lobbied both the National Research Council and the National Center for Educational Statistics for disciplinary status. The result was inclusion in the National Research Council taxonomy of graduate programs under the designation Rhetoric and Composition and one code for all instructional programs in Professional, Technical, Business, and Scientific Writing (23.1303) (Phelps & Ackerman, 2010).

Rude (2009) notes an instance in which technical communication is omitted from one important reference work's list of disciplines that constitute English studies. *English Studies: An Introduction to the Discipline(s)* (McComiskey, 2006) includes chapters on linguistics, creative writing, rhetoric and composition, literature, critical theory and cultural studies, and English education. Rude interprets this omission as an artifact of politics and power: anxiety about the surge of the "immigrant" field and an effort to suppress it (2009, p. 190). Her assessment points the way to our next discussion of the processes in play for professionalization of technical communication: politics and power.

## In This Issue

An important aspect of professionalization, according to Savage (1999), is awareness of our historical identity. Several historical studies in the first volume of Kynell-Hunt and Savage (2003) show the promise of shaping professional consciousness through historicizing technical communication. In this special issue, Edward A. Malone leads the way forward by looking back with "The First Wave (1953–1961) of the Professionalization Movement in Technical Communication." Malone notes that recent discussions about the professionalization of technical communication have shown little awareness of this early history. When scholarly articles on the topic include a literature review at all, they usually limit their review to post-1970 or even post-1980 scholarship. Malone's article fills a gap in our understanding of the history of technical communication as a profession by reviewing six professionalization issues and providing an historical perspective for each. He finds that our history teaches us to be cautiously optimistic about our achievements.

Janel Bloch examines professional consciousness as one of five professionalization themes in a collection of internship reports of technical communication graduate students. Her article "Glorified Grammarian or Versatile Value Adder? What Internship Reports Reveal about the Professionalization of Technical Communication" provides a study of interns over the recent quarter-century; this is an important longitudinal study that successfully examines a substantial and relevant data set. This article argues that steps toward enhancing professionalization can be made in the earliest work experiences of a technical communicator's career, by all involved—interns, employers, and faculty. Bloch also provides recommendations for students, sponsoring organizations, and faculty to design internship programs that will help contribute to the professionalization of the technical communication field.

We title this special issue "Professionalization of Technical Communication: Zeitgeist for Our Age" because running through the initiatives described here and in the next issue is a clearly discernible pattern that shows an appetite for professionalization. I see a growing collective consciousness, but certainly not collective agreement, for professionalization. It is a spirit—or zeitgeist—for our time.

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Manuscript received and accepted 18 November 2011.

# The First Wave (1953–1961) of the Professionalization Movement in Technical Communication

Edward A. Malone


## Abstract

**Purpose**: To demonstrate that the professionalization of our field is a long-term project that has included achievements as well as setbacks and delays

**Methods**: Archival research and analysis.

**Results**: Many of the professionalization issues that we are discussing and pursuing today find their genesis—or at least have antecedents—in the work of the founders of the profession in the 1950s.

**Conclusions**: Our appraisal of our professionalization gains must be tempered by a certain amount of realism and an awareness of the history of the professionalism movement in technical communication.


**Keywords**: technical communication, history, professionalization, 1950s

## Practitioner's Takeaway

- This study provides a consideration of current professionalization issues in the context of their historical development.
- It encourages us to temper our enthusiasm and remain cautiously optimistic about recent gains in the quest for professional status and recognition.
- It makes us better informed about the origin and early development of the profession of technical communication in the United States.
- It contributes to the creation of a strong, shared historical consciousness among members of the profession.

## Introduction

As a former president of the Society of Technical Writers and Publishers (STWP) noted, "There was a controversy in the early days. Was technical writing really a profession? Did we want it to be a profession? If it was, how should we get other people to recognize that it was?" (Root, 1972, p. 1). The first generation of professional technical communicators was deeply interested in the process and prospects of professionalization. They set themselves "the task of exploring what it means to become a profession, how professionalization might be achieved, and what possible consequences might result from our achieving full professional stature" (Savage, 1997, p. 34). The profession-building activities of the 1950s (e.g., the formation of professional organizations and journals, the writing of professional codes of conduct, the creation of academic programs) were attempts to professionalize technical communication. The earliest technical communication journals and conference proceedings included articles strategizing and discoursing about professionalization—for example, Robert T. Hamlett's "Technical Writing Grows into a New Profession" (1952), Floyd Hickok's "Professional, Artisan, Something Else?" (1955), and Israel Sweet's "Is

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Technical Writing a Profession?" (1957). For at least 60 years, in fact, technical communicators have been seeking—and predicting the eventual achievement of—mature professional status (Wright, Malone, Saraf, Long, Egodapitiya, & Roberson, 2011).

Recent discussions about the professionalization of technical communication have shown little awareness of this early history. When scholarly articles on the topic include a literature review at all, they usually limit their review to post-1970 or even post-1980 scholarship. There have been notable exceptions. For example, Smith (1980) offered a historical perspective (1940 to the present) on the "Pursuit of Professionalism" from his vantage point as a member of the first generation of professionals as well as a long-time editor of the Society for Technical Communication's (STC) *Technical Communication*. By tracing technical writers' ethical outlook from the late 1800s to the present, Brockmann (1989) adopted a historical perspective on professionalism that is simultaneously narrower and broader than Smith's. Malcolm and Kunz (2001) provided an account of STC's four formal studies of the certification issue between 1975 and 1998, demonstrating that the organization has had a long-standing interest in the topic. Most recent studies, however, lack this kind of concern with the historical development of these issues.

To be sure, the work on professionalization since 1990 has been more sophisticated and better informed in many ways than the work of pioneers such as Hamlett (1952) and Hickok (1955) and even scholars such as Sweet (1957) and Light (1961). Yet I think we can benefit by knowing the early history of these issues, examining how far back the discussions extend and how little some of them have changed since the 1950s. Many of the professionalization issues that we are discussing and pursuing today find their genesis—or at least have antecedents—in the work of these pioneers.

In this article, I will identify six current professionalization issues (e.g., the role of professional organizations, codification of a specialized body of knowledge, certification by professional organizations) and examine how they were viewed and pursued during the first wave (1953–1961) of the ongoing professionalization movement in technical communication. My purpose for doing this is to demonstrate that our founding fathers (and mothers) were well aware of these issues and pursued them in earnest. Whether the fact that we have been pursuing professionalization on similar terms for almost 60 years gives us hope or despair for the future, we should at least recognize that professionalization is a long-term project that has included achievements (e.g., professional organizations, scholarly journals) as well as setbacks and delays (e.g., certification of practitioners, accreditation of academic programs).

## Three Stipulations

Although some have argued that Reginald Otto Kapp, who started the Presentation of Technical Information Group in England in the late 1940s, was the father of the "worldwide profession" of technical communication (Kapp, 2005), I take the position that the seeds of the technical communication profession in the United States were planted in the 1950s by the founders of the New York-based Association of Technical Writers and Editors (TWE), the Boston-based Society of Technical Writers (STW), and the Los Angeles-based Technical Publishing Society (TPS). Since then, we have been seeking mature professional status and recognition. Thus, when I refer to the *profession of technical communication*, I mean the developing or maturing profession: it has already sprung into being but has not yet fully matured.

Moreover, I take the position that our profession has always been technical communication, not technical writing first and then technical communication later. In other words, the profession did not evolve from writing narrowly to communication broadly; it began broadly as communication (Malone, 2010, pp. 175–176). There were debates in the 1950s about whether the profession should be defined as writing narrowly or communication broadly—in fact, such debates were at the heart of the organizational mergers that took place in the late 1950s—but they were largely resolved at an early date in favor of communication. The profession's formal adoption of the term *technical communication* as the name of the profession represented a correction, rather than an update, of the name; the term *technical writing* had always been a misnomer when applied broadly to the profession. When STC changed its name from the Society of Technical Writers and Publishers to the Society for Technical Communication in 1971,

then STC President Mary Schaefer (1971) (Figure 1) wrote that the new name "is explicitly constant with the primary purpose for which our Society was formed [in 1953]—to advance the theory and practice of technical communication in *all* media" (p. 5).

**Figure 1: Mary M. Schaefer (1913–2001), first woman president of STC, serving in 1970–1971. During World War II, she left her position as a secretary to become a technical editor in the Office of the Chief of Ordnance, U.S. War Department, Washington, D.C. She later worked as a technical communicator at the Naval Research Laboratory, Vitro Corporation, and the Applied Physics Laboratory of the Johns Hopkins University (Shimberg, 1966). Photo from the STC archives.**

Finally, when I refer to the *professionalization movement in technical communication*, I am referring to a movement that has been taking place since at least the early 1950s. My research suggests that there have been several waves in the movement. The first wave seems to have crested between 1953 (the formation of TWE) and 1961 (the publication of Light's "The Technical Writer and Professional Status"). Relatively little attention was paid to professionalization issues in the mid- and late-1960s, but the movement picked up again in the United States in the early to mid-1970s with the formation of the Association of Teachers of Technical Writing (ATTW) and the Council of Programs in Technical and Scientific Communication (CPTSC), the launching of the *Journal of Technical Writing and Communication*, and the publication of Cogan's (1974) "Pursuing Professional Identity and Maturity." I have not traced the relevant scholarship closely beyond this point, but there seems to have been considerable activity in the early 1980s and at the turn of the millennium (1999–2003) (Malone, n.d.). In her call for proposals for this special issue of *Technical Communication*, Coppola (2010a) suggested that the professionalization movement in technical communication may have begun to crest again after a 6- or 7-year hiatus.

## Six Professionalization Issues

I use the term *professionalization issue* to refer to something that is believed to be an attribute of a profession's mature status or a means of achieving such a status. Such an issue is an important topic in our discussions about professionalization. With this definition in mind, I will discuss six current professionalization issues under the following headings:

- Professional Organizations
- Body of Knowledge
- Ethical Standards
- Certification of Practitioners
- Accreditation of Academic Programs
- Legal Recognition

In each case, I will try to establish the relevance of the issue to our current professionalization efforts and discussions before discussing the issue's early history.

### Professional Organizations

Savage (1999) identified the establishment of "formal organizations that unify the practice and represent the profession" as one of the "key socio-political factors in professionalization processes" (p. 366). More recently, Carliner (2003) has argued that professional organizations in technical communication contribute to feelings of power, status, and legitimacy at both the individual and communal levels. At the individual level, they provide opportunities for affiliation with other technical communicators, professional development, and public recognition of accomplishments. At the communal level, they improve technical communication's standing in the academy by publishing scholarly journals, and they can also improve its standing in industry by certifying technical communicators, increasing the profession's public visibility, and helping to manage industry's perceptions of the profession.

At an early date, technical communicators in the United States recognized that professional organizations were a means of cultivating the profession of technical communication. The men and women who held two breakout sessions at the April 1953 Workshop on the Production and Use of Technical Reports in Washington, DC, to discuss the special problems facing technical writers and editors went on to create the Association of Technical Writers and Editors (TWE) because they believed that "a national organization was

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vital to the growth of the profession" (Clark, 1956, p. 2; Warnock, 1953). Their constitution stated that the organization's primary objective was "to advance the profession" through such activities as developing "a literature of the profession" and promoting professional ethics ("TWE constitution," 1955, p. 8). The Boston-based Society of Technical Writers (STW), also started in 1953, had the same general objective in mind. As their president declared two years after STW's formation, "Now that organization as a national professional society, with graded membership, is complete, we are free to apply our energies directly to our basic program: developing the profession" (Flint, 1955, p. 1). One of the purposes of the Technical Publishing Society (TPS), started on the West Coast in 1954, was "to promote the profession by establishing and maintaining minimum requirements of professional practices" (Van Hagan, 1954, p. 1). These three organizations would eventually merge to become the Society of Technical Writers and Publishers (STWP), the former name of STC. Years later, the editor of STC's *Technical Communication* would remind his readers that "these [early] societies were established and were supported precisely because they were seen as a necessary step on the path toward professionalism" (Smith, 1980, p. 2).

Both Savage (1999) and Carliner (2003) have suggested that we have too many organizations (e.g., STC, PCS, ATTW) to pose a unified front in the struggle for professionalization. Carliner (2003), in fact, sees cooperation, if not consolidation, as necessary to move to "the next level" (p. 98). The founders of our profession—including Samuel A. Miles (Figure 2)—grappled with the same problem in the 1950s. Miles (1955), who had started an organization in New York City in 1954, wrote:

> One thing is certain: the technical writer, by whatever name we may call him, and under whatever definition we may formalize, is here to stay. The continued growth of technical writing is proof of this fact. As I write these words, another group—the twelfth, thirteenth, or fourteenth, depending on the definition of a group—has come to my attention. It is the Technical Writing Improvement Society, of Los Angeles….
>
> TWIS is the third or fourth group ambitious enough to consider itself the nucleus of a national group. All this activity means that there is hope that we shall soon get together and that the "Tower of Babel" which we are creating will be a firm structure based on mutual understanding. (pp. 3–4).

In late 1955, Miles' organization merged with TWE to become TWE's New York chapter (Kleinman, 1989). This was the first in a series of consolidations that would eventually lead to the creation of STC.

**Figure 2: Samuel A. Miles (1916–1982), cofounder and vice president of Miles-Samuelson, a technical publishing business in New York City, and founder (1954) of the New York-based Society of Technical Writers and Editors, an independent organization that merged with TWE in late 1955 to become TWE's first and largest (New York) chapter. As early as 1949, Miles had explored the possibility of creating a "society" of scientific and technical communicators within the framework of the American Association for the Advancement of Science (Miles, 1951; "Operation," 1951; "Sam Miles," 1955). Photo from the Fall 1955 issue of the *TWE Journal*.**

A major step toward unification was taken in 1957 when TWE and STW merged to form the Society of Technical Writers and Editors (STWE). In the discussions leading up to this merger, TWE and STW argued about membership qualifications and grades of membership. TWE wanted to follow its practice of allowing anyone to join who had a professional interest in technical communication, while STW wanted to restrict membership to technical writers, technical editors, and teachers of technical writing, excluding illustrators, production people, and especially technical librarians. Whereas TWE did not want membership grades, STW wanted membership to be stratified into members, senior members, and fellows (Malone, n.d.). As one TWE member complained, "[STW officers] have set up these classifications so that they can be in the top grades and they are unwilling to become just ordinary members. They want to remain stars" (TWE, 1956, p. 52). After several months of negotiations (Figure 3), the

two groups finally compromised, essentially adopting TWE's policy on membership qualifications and STW's policy on membership grades (Malone, n.d.).

**Figure 3: Meeting at Hotel Statler, New York City, on May 14, 1956, to discuss TWE-STW merger. From left to right: Francis H. Achard (STW secretary-treasurer), Elsie C. Ray (TWE secretary), Paul S. Kennedy (TWE treasurer), Richard Frehsee (TWE president), Donato C. Ian (STW 2nd vice president), Irving Jenks (TWE vice president), Paul H. Flint (STW past president), and Ronald D. Eames (STW president). Photo from the archives at STC headquarters.**

It is clear from at least one transcript of these discussions that TWE members thought the decisions about membership qualifications would determine the composition of the profession for the future. One member asked, "What profession [are we talking about]?" and another replied, "That will be determined by who is going to be included. Everybody who is going to be included will make up the profession" (TWE, 1956, p. 49). Indeed, the adoption of TWE's policy on membership qualifications may have contributed (however modestly) to the broad-based profession of technical communication that we have today.

Not satisfied by the merger of TWE and STW, however, Light (1959) argued for an even broader coalescence of professional organizations. He noted with dismay that electronics writers were represented by STWE, medical writers by the American Medical Writers Association, science writers by the National Association of Science Writers, and writers in the nuclear energy industry by the Nuclear Energy Writers Association. This "splintering of members of our craft into the corners and tiny pigeon-holes of our daily concerns" struck Light (1959) as counterproductive because such "narrow-minded interest does not lend itself to genuine professional growth" (p. 23). Thus, he called for a "larger perspective" reflecting "the professional rather than the craft attitude or point of view":

> I am convinced that the writing and editing of technical and scientific material constitute the inescapable common denominator of interest and concern to the memberships of ALL these groups, and that differences of approach and concern are matters of degree rather than kind. (p. 23).

By uniting their efforts, Light believed, members of these groups would discover "what the advantages are in collaboration and eventual unification of forces" (p. 23). These particular groups never did unite, and one can only imagine what might have become of the profession if they had.

The final step toward unification of technical communicators in the United States came in 1960, when STWE merged with the Los Angeles-based TPS to become the Society of Technical Writers and Publishers (STWP). TPS's membership, reflecting the entire field of technical publishing, was even broader than TWE's membership. It included such groups as filmmakers, printers, and managers of technical typists (Figure 4)—an inclusivity that had to be scaled back during the merger negotiations. The president of STWE noted that the merger with TPS was undertaken first and foremost because "it was important to the advancement of the profession that we have one National and International Society instead of several" (Grogan, 1960, p. 3). Although TWE and STW had started chapters as far west as Albuquerque, TPS brought many of California's technical communicators into the fold. With the formation of STWP in 1960, members of that first generation of professionals believed that the goal of unifying the profession by and large had been achieved and that mature, professional status and recognition were just around the corner.

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**Figure 4: Cover of the September–October 1957 issue of the Technical Publishing Society's magazine. The content in the vertical stripes on the cover reflected the organization's broad definition of the profession, which encompassed writing; editing; graphic arts and art editing; printing and reproduction; visual education; and management. The title of the magazine, *Technical Communications*, also reflected this broad definition.**

## Body of Knowledge

An important issue in the current professionalization movement is the codification of a specialized body of knowledge. Rainey (2004) viewed the codification of multiple bodies of knowledge for technical and professional communication as the first step in the creation of a workable certification system, which he viewed as the lynchpin of professionalization. He proposed to codify the body of knowledge by creating an encyclopedia of technical and professional communication. More recently, Coppola (2010b) presented a history and description of the Technical Communication Body of Knowledge (TCBOK) project, STC's initiative to create a coherent framework for studying/understanding the technical communication profession's body of knowledge. STC TCBOK is "an effort of many to resolve seemingly archetypal tensions within our profession"—tensions that have existed since the creation of STC (Coppola, 2010b, pp. 10–11). Mature professional status may rest on the important work that is being done now in this area.

Defining a body of knowledge was also an important goal of the first generation of technical communicators. Scholars such as Sweet (1957) and Light (1961) had read Flexner (1915) and especially Cogan (1953, 1955), whose definitions of a profession included the requirement of having a well-defined, specialized body of knowledge. Light (1961) had also read Vannevar Bush's definition of a profession: "First and foremost, its members are the possessors and custodians of a special field of knowledge, acquired by long, assiduous study" (as cited in Light, p. 6). Sweet and Light, in turn, communicated these definitions (i.e., the attributes of a profession) to the larger body of technical communicators interested in the professionalization of the field.

Israel Sweet was the dean of the Evening School at the Pratt Institute in New York City and later Vice President of Education at LaSalle Extension University, a now-defunct correspondence school. At the STWE conference, Sweet (1957) raised the question, "Is Technical Writing a Profession?" He noted that many practitioners and academics were simply calling themselves professionals in hopes of enjoying the privileges of the title. He carefully analyzed the attributes of a profession that Flexner (1915), Cogan (1955), and others had put forth in their articles and decided that most of the attributes were operational rather than definitional. He identified two, however, that were relevant to his question: "a significant body of knowledge directly identifiable to technical writing and unique to the field" and "professional training for technical writers" (pp. 67–68).

Although Sweet (1957) concluded that technical writing did not yet have a unique, substantial, well-defined body of knowledge, he identified what that body of knowledge could be if it existed:

> If there is a body of knowledge directly related to technical writing, it must be, not the content of other disciplines but a content of its own; and it might be assumed that such a body of knowledge might be called technical communication (p. 68).

Note his use of the term *technical communication*. Even at this early date, he recognized the inadequacy of the term *technical writing* for describing the diverse activities and interests of people in the field. Sweet (1957) also concluded that technical writers were not receiving proper professional training. He charged academia with the responsibility of identifying and codifying technical writing's body of knowledge and training technical writers:

> It is the university, in short, that must identify the body of knowledge associated with a particular field of [*sic*] discipline, and that must explore this body of knowledge in an effort to sharpen its focus and to amplify its considerations. It is the university that must provide professional training for the technical writer (p. 69).

To Sweet, then, technical writing was not yet a profession.

Light (1961) questioned whether the concept of profession was obsolete and whether the goal was still worth pursuing. In either case, he said, the course of action should be the same: technical writers should seek "specialized, academic education and training" from universities (p. 9). Like Sweet, Light believed that the tasks of defining a specialized body of knowledge and developing technical writing curricula are integrally related, and he offered the following explanation as to why technical writing did not yet have a specialized body of knowledge:

> Most professions have a relatively long history of development. From slow emergence in the world of work or thought to the build-up of an organized body of knowledge peculiar to the practitioners, to the specific and special training for performance—this kind of background is still denied the technical writer because of the recency of his emergence. (p. 5)

Light (1961) was fond of calling attention to the illegitimacy of technical communicators: he believed they were "a bastard group of uncertain origin, with no conventional or legitimate genealogy" (p. 5). This fact militated against their upstart desire for professional recognition and status.

Another writer on the subject of a technical writing body of knowledge was Floyd Hickok (Figure 5), the practitioner who founded STW in Boston in 1953. Hickok had a bachelor's and a master's degree in English education and worked as a high school teacher before joining the Navy during World War II. In the military, he received "extensive college level training in electrical engineering" (Hickok, 1963, p. 1). After his discharge, he went to work as a junior electronics engineer at MIT's Laboratory for Electronics. Later, he was promoted to manager of the technical publications department (Hickok, 1963). In March 1955, Hickok flew to England to present a paper at a meeting of the Presentation of Technical Information Group in London about the professionalization of technical writing (Hickok, 1955).

**Figure 5: Floyd A. Hickok (right, 1907–2003), founder and first president of the Boston-based Society of Technical Writers, passes the gavel to the newly elected second STW President Paul H. Flint (left, 1908–1998). Hickok worked closely with Flint in both the Navy reserves and the summer Technical Writers Workshop at Tufts University, where Flint was an English professor and a dean (U.S. Navy, 1962; "Dr. Paul H. Flint," 1957). Photo from the June 1954 issue of the *Technical Writing Review*.**

In that paper, Hickok proposed four characteristics of a professional person: he possesses and is able to use "a body of specialized information," he has the necessary skills to do his job well, he performs his job ethically, and he is concerned about recruiting qualified people to the field. Of these four characteristics, only the first one was in question. Defining the body of knowledge only in terms of language and publishing, Hickok (1955) argued, would be a recipe for "a non-professional future"; therefore, "the Technical writer must use, professionally, the body of knowledge of a science as well as that of publishing" (p. 11). Although Hickok believed that the technical writer could claim the title of a professional on that basis, he did not think the technical editor could, for the technical editor was "a service person to another type of professional person," and "a

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person who must play this role will find it difficult to make valid his claim to professionalism" (p. 11). Hickok was confident, however, that technical writing would eventually become a profession as society's dependence on technical communication became greater and the science of communication was better understood through systematic study.

Although the founders of the profession were more concerned with creating professional organizations and establishing academic programs than circumscribing a body of knowledge, they fully recognized the importance of having a well-defined, specialized body of knowledge and worked in their own way to define it—not by creating an encyclopedia or the kind of project that STC TCBOK represents, but by establishing and developing professional journals. The first technical communication journals were created soon after the first professional organizations in technical communication, and they were created, in part, to begin the necessary process of developing and delineating the body of knowledge required for technical communication to become a mature, recognized profession. One of the ways in which TWE and its sister organizations intended to advance the profession was by developing "a body of literature"—a corpus representing the profession's collective attempt to develop, identify, and codify its body of knowledge through research and intellectual exchange. TWE's *Journal*, STW's *Technical Writing Review*, and TPS's *Technical Communications*—the first technical communication journals—served as vehicles for this project. After the TWE-STW merger in 1957, the *STWE Review* carried on the project: "The primary objective of the *STWE Review* will be to contribute to the professional advancement of technical writing and editing" (Grogan, 1958, p. 4).[1]

## Ethical Standards

Buchholz (1989) explained that society grants professions a certain degree of autonomy to govern themselves and allows its members to enjoy the privileges of status and recognition in exchange for a promise to "behave responsibly and ethically to all humankind" (p. 62). Savage (2003) noted that "emerging professions almost always articulate a social commitment and a set of guiding ethical principles" (p. 3). Doing so might be viewed as their application for recognition as a profession. Working on behalf of a profession, a professional organization usually makes this social contract explicit in the form of a code of conduct or a list of ethical principles. The organization may discipline or expel members who behave unethically.

In 1998, STC developed a set of ethical principles that members should follow in their professional activities. These principles are organized under the following six headings: legality, honesty, confidentiality, quality, fairness, and professionalism (STC, 1998). To my knowledge, STC does not monitor, enforce, or even aggressively promote adherence to these principles. Even if STC did, it might not change behavior. Dombrowski (2000a) argued that codes of conduct are important but ultimately insufficient: ethical behavior "cannot be reduced to mechanical conformance to rules, because generalized rules cannot capture the complex contingency of real, particular situations, and because ethical conduct usually involves a heavy measure of personal judgment and decision making" (p. 4).

In 1955, Robert T. Hamlett (Figure 6), the first president of TWE, proposed a code of ethics for technical writers as a way of fostering higher professional standards. Hamlett may have taken his cue from the codes of ethics that engineering organizations had created. Hamlett (1952) was a firm believer that technical writers should have engineering degrees. With a degree in electrical engineering from the University of Illinois, he had worked for several years as an engineer before taking a job as a technical writer with Sperry Corporation in New York. He eventually moved into a management position and was in charge of hiring technical writers, editors, and others to staff one of the largest corporate publications offices in the country ("About the authors," 1959). His 1955 code consisted of ten affirmative and negative promises written in first person, presumably to be spoken by the technical writer (Table 1). Some of these promises obviously reflected his own pet peeves—for example, "I will not give 'lip service' to the statement that 'Engineers are poor writers'" (Hamlett, 1955, p. 27). Although it was never adopted, this code of ethics may be the first one written specifically for technical communicators. Hamlett (1956) later developed this code into a full-length article about good and bad technical writers—an article

1 For the history of STC's journal, see Smith (1990) and Malone (2008a). For the history of the IEEE Professional Communication Society's journal, see Sanders (1997) and Malone (2008b).

he described as a "Do-It-Yourself Kit" for those who wanted to be regarded as professionals.

**Figure 6: Robert T. Hamlett (left, 1902-1976), first president of the Association of Technical Writers and Editors (TWE), passes the gavel to incoming president Richard Frehsee (right, 1913-2006). Hamlett was head of the publications department at Sperry Corporation in New York. In the 1950s, he coined and promoted the term *publications engineer* as an alternative to the term *technical writer* (Hamlett, 1952). Frehsee was a long-time employee of IBM in Endicott, New York. Photo from the Spring 1956 issue of the *TWE Journal*.**

In a controversial book, Bishop (1963) described the pervasive corruption in the technical writing industry of the 1950s. The images on the book's dust jacket (Figure 7) alluded to the proverbial three monkeys who see, hear, and speak no evil—the evil in this case being greed, fraud, and incompetence. As "the first Technical Writer ever hired on the Pacific Coast by the first technical data subcontracting firm ever formed in the Los Angeles area" (Bishop, 1961, p. ii), Malden Grange Bishop had interviewed and worked with hundreds of technical writers during the 1940s and 1950s. In his book, for example, he told the story of his involvement in an FBI sting operation leading to the arrest of two men who had promised to send government contracts his way in exchange for kickbacks. He told other stories of cut-and-paste artists who patched together military equipment manuals from old manuals; job applicants who falsified their credentials, even one who tried to pass off Bishop's work as his own; and well-paid technical writers who knew less about science than the average high school student. It was in this general context that STWE formulated and disseminated its Canons of Ethics in 1958. These canons were based on a code developed by the Engineers' Council for Professional Development (ECPD), the predecessor of

**Table 1: Hamlett's Code of Ethics for Technical Writers, 1955**

| | |
|---|---|
| 1. | I recognize the "service" nature of my work. My present and my future depend upon the products of science and its workers in all levels. |
| 2. | I will not give "lip-service" to the statement that "Engineers are poor writers." (I know that they vary no more in writing ability than any other group. It is my job to recognize the work of good writers and to help that of poor writers.) |
| 3. | I recognize that my profession is founded on quality. The reason for my existence as a technical writer stems from my contribution to the quality of technical writing. |
| 4. | I will not be "sensitive" about credit for my part in creating technical literature. I believe that outstanding performance is its own best reward. |
| 5. | I will not "push" my profession. But I will serve fully and effectively in my assigned tasks so that the profession will be "pulled" up by its performance. |
| 6. | I will endeavor to keep a proper balance between literary quality and technical accuracy. I will not insist on "my way" unless it is the only way. |
| 7. | I will recognize always the indispensable efforts of others in making my product a good one. The illustrator, the photographer, the typist, and the printer must share in common pride for a job well-done. |
| 8. | I believe that the prestige of my profession will be increased by higher standards of workmanship, and I recognize my individual responsibility in this respect. |
| 9. | I believe that the prestige of my profession will be increased by the establishment of higher educational standards for technical writers. |
| 10. | I will give my share of support to professional societies which are sincerely dedicated to the raising of standards in technical writing and increasing the prestige of technical writers. |

## The First Wave (1953–1961) of the Professionalization Movement

the Accreditation Board for Engineering and Technology (ABET). They were adopted "as a necessary framework within which technical writing must grow if it is to achieve professional status" (Mitchell, 1962, p. 301).

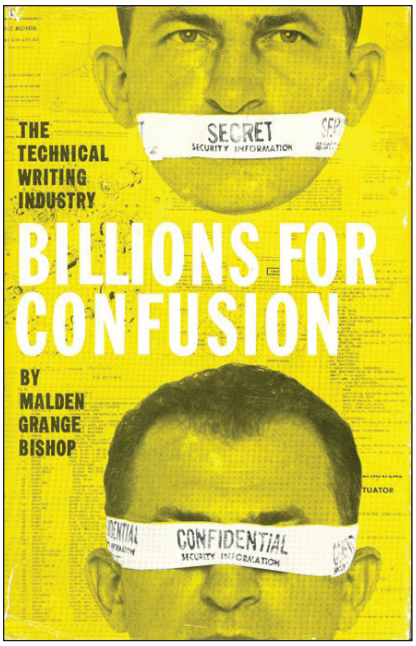


**Figure 7: Dust jacket of Bishop's *Billions for Confusion: The Technical Writing Industry* (1963), an exposé of greed, fraud, and incompetence in the technical writing industry during the 1950s. A small press in California had published an earlier version of the book under the title *Go write, young man!* (1961), but the book did not attract broad national attention until the second (retitled) edition.**

Brockmann (1989) questioned whether a code based on the problems facing engineers could adequately serve technical communicators, but he also pointed out that there was no agreement in 1958 about ethical standards for technical communication because the profession was still in its infancy. Without consensus, they had to borrow from another profession's code of ethics. Emerging professions create codes of ethics not only to guide the behavior of their members, but also to "provide evidence of professional intentions and ideals" (as cited in Brockmann, 1989, p. 111). The 1958 code, however, did not have a long-term effect on the technical communication profession. Schaefer (1980) recalled that the 1958 code faded into the background, and not much attention was paid to creating profession-wide ethical standards for technical communicators until after Watergate, a scandal that heightened the nation's concern about the lack of ethical behavior in society and the need for education in ethics and guiding principles.

One of the most articulate statements about the important place of ethical standards in the new profession came in 1960 from Hobart C. McDaniel (Figure 8), who would later become president of STWP. McDaniel (1960) believed that a profession originates from the professional attitudes that workers have toward their work. Over time, these attitudes become "moral responsibilities and ethical considerations" that guide behavior and eventually lead to a shared set of ethical standards. Such standards must come "from the profession itself and from the preparatory period of study and learning before entering the profession," not from an external source (p. 36). McDaniel (1960) admonished all technical communicators to follow their professional societies' codes of ethics and promote the highest possible standards of ethical behavior in the workplace. He believed that this was the most important contribution they could make to their profession.

**Figure 8: Hobart C. McDaniel (1902–1990), manager of the technical information department at Westinghouse in Pittsburgh and president of STWP in 1962–1963. "Mac" (as he was called) launched a one-man campaign in the 1960s to change the name of the profession from *technical writing to technography* (Galasso, 1963). Due to his influence, the *STWP Review* was subtitled "Journal of Technography" for several years. Photo from the May 1962 issue of the *STWP Newsletter.***

By 1975, most of these early efforts to formulate, promulgate, and inspire ethical standards had been forgotten. At the crest of what might be called the second wave in the professionalization movement, a member of STC's Houston chapter argued that the first step on the path to professional status and recognition must be the development of a code of ethics for technical communicators. The following year,

STC's committee on ethics, formed in the aftermath of Watergate, drafted a code and proffered it to STC members (Harbaugh, 1978). The resulting "Code of Communicators" was apparently created without awareness of the 1958 code and was not much better by most accounts (Schaefer, 1980).

### Certification of Practitioners

STC has considered the certification issue several times in the past 35 years. It appointed committees to examine the feasibility of a certification system in 1975, 1981, 1982, and 1994 (Malcolm & Kunz, 2001). The members of these committees contributed many hours of service—they conducted surveys and wrote reports—but their efforts did not result in a certification system immediately. They discovered that there were not enough interested STC members to support such a system (Malcolm & Kunz, 2001). After many delays and setbacks, STC finally began certifying technical communicators in May 2011. This newly created certification system employs portfolios of work rather than examinations to assess a technical communicator's competencies in six areas: user analysis, document design, project management, content creation, delivery, and quality assurance. Certification is valid for three years, after which the individual must be reevaluated. Recertification requires ongoing participation in professional development activities (Jong, 2010).

Technical communicators have long recognized the role of certification in the professionalization process. Other professions, such as engineering, law, and medicine, have rigorous certification or licensing systems in place; these systems have weighed heavily on the minds of technical communicators seeking status and recognition. The first discussions about the certification of technical communicators apparently took place in the 1950s. At the joint STWE-TPS convention in 1960, the president of McGraw-Hill noted the long-standing interest in the possibility of a certification or licensing system for technical writers: "I understand that this subject has been discussed several times in your annual meetings, but as far as I know nothing has been done about it" (Benjamin, 1960, p. 234). Thus, even at this early date, the feasibility of a certification system had been discussed at several past annual conventions and had already fallen into that limbo where controversial issues go.

The McGraw-Hill president urged his audience to resurrect the idea as soon as possible: "We have systems for licensing engineers, electricians, plumbers, and undertakers, so why should we not have a system for licensing technical writers?" (Benjamin, 1960, p. 234). During this period, McGraw-Hill sold technical writing services to private companies and the federal government, including the military, but eventually found that the success of this part of their business was being undermined by a plethora of unqualified freelancers ("Technical Writing Service," 1954; Benjamin, 1960). The McGraw-Hill president believed that a system of certification or licensing would "go far to convince military procurement officers and other customers" to use bona fide professionals rather than amateurs. He suggested that this system be implemented through "on-the-job training programs with graded examinations" (Benjamin, 1960, p. 234).

Later that year, STWP's Education and Professional Development Committee took up the issue in earnest, no doubt influenced by this prominent speaker's suggestion. The following statement comes from the minutes of the November 4, 1960, STWP Board of Directors meeting:

> A discussion was held concerning the feasibility of formulating voluntary examinations which, when passed, would entitle the writer, illustrator, or other publication personnel to be registered as a professional and be given a certificate similar to a "professional engineer." This item was referred to the Standards and Ethics Committee with recommendation that they check with state examining boards and other professional societies, and if the project seems feasible, formulate the examinations to test basic "knowledge," not "how he does it or what techniques are required for specific writing tasks." (Berry, 1960, p. 6)

Nothing seems to have come of this initiative, however. As far as I can tell, no examinations were created. The work of this committee, like that of committees in the 1970s, 1980s, and 1990s, was quickly forgotten.

Although Malcolm (1987) recalled attending a session about the certification of technical communicators at the 1964 STWP convention in San Diego, I have not been able to find any evidence

of this session in the published proceedings of the convention. However, I did find a paper on the subject in the proceedings of the 1964 Institute in Technical and Industrial Communications, an annual conference that English Professor Herman Weisman sponsored at Colorado State University, starting in the late 1950s and continuing throughout the 1960s. Titled "A Program for Accrediting Technical Writers," the paper was presented by A. M. I. Fiskin, an associate professor of English at Drake University. Fiskin (1965) proposed the creation of a certification system that would be based on examinations and have seven steps, with a diploma and the title "Associate Technical Writer" being awarded after Step 4, and with certification and the title "Certified Technical Writer" being awarded after Step 7. The candidate for certification would have to demonstrate (1) knowledge in three scientific fields; (2) competence in the use of English grammar and writing; (3) knowledge of illustration, blueprints, and reproduction; (4) proficiency in editing (e.g., revision, rewriting); (5) ability to work within given formats (e.g., military specifications); (6) in-depth knowledge of two of the scientific fields from Step 2; and (7) ability to manage a large project with many participants. Candidates could skip some steps by getting appropriate university degrees (Fiskin, 1965).

### Accreditation of Academic Programs

The accreditation of academic degree programs in technical communication continues to be an important issue in professionalization discussions. Accreditation is a kind of certification: a designated body, such as a professional organization or a governmental agency, certifies that an academic program meets established quality standards for programs of its kind. Davis (2003) argued that the development of professional standards, especially standards for accrediting academic programs, may be "the most important task in our century [i.e., the 21st century] for the profession of technical communication" (p. 84). Noting the benefits of accreditation to academic programs in engineering, Hayhoe (2007) called for STC's Academic Community to work with CPTSC and ATTW to "explore the desirability of establishing an accreditation system" for academic programs in technical communication (p. 408).

The issue of accreditation is related to the issue of program assessment (i.e., the measuring of students' achievement of formally articulated learning outcomes). The discipline of technical communication has seen a proliferation of the literature about program assessment in recent years, with edited collections of essays and special journal issues devoted to the theme. See, for example, the bibliography of this literature on the CPTSC website (St.Amant et al., 2011). See also the special issue of *Technical Communication* on program review and assessment (St.Amant & Nahrwold, 2007) and the book on assessment by Hundleby and Allen (2010). This rapidly growing body of literature notwithstanding, the profession has made little progress in implementing credible systems of assessment, external review, and accreditation of academic programs.

Mark Haselkorn, the 1996–1997 president of IEEE PCS, viewed accreditation of academic programs as an important step in the professionalization of technical communication. In the mid-1990s, he appointed an ad hoc committee to investigate the possibility of using ABET to accredit technical communication programs (Haselkorn, Davis, Goodman, & Nolen, 1998). ABET is a confederation of 30 professional and technical organizations, including IEEE. The American Institute of Electrical Engineers, the predecessor of IEEE, was in 1932 one of the seven founder organizations of ABET's predecessor, ECPD (ABET, 2010). This longstanding relationship between IEEE and ABET suggested ABET (in cooperation with PCS) as a potential accrediting body for technical/professional communication programs. On its Web site, PCS states that it is the only professional organization to give serious consideration to accreditation of academic programs ("ABET Information," 2007). Nevertheless, PCS does not have an accreditation system in place and seems to have abandoned the idea.

The most successful initiative in this area to date has been CPTSC's program review service. Although it does not accredit programs, CPTSC will put an interested academic program in touch with willing and qualified external reviewers. It is the responsibility of the program to negotiate such matters as "expenses, honoraria, and reporting requirements" (CPTSC, 2008a). CPTSC also provides guidelines for a self-study that programs prepare before the reviewers visit campus. The results of the review are intended for a program's internal use:

> The purpose of the review is to help develop strong programs in technical and scientific communication, not to compare or rank programs, and not to establish certification for programs or their graduates" (CPTSC, 2008a). The idea for the review service seems to have originated in 1987 (Little, 1991), but the first review did not take place until 1995 (Rude, 1995, p. 65). The most recent one may have been in 2004 ("Business Meeting Minutes," 2004, p. 104; Tracy Bridgeford, personal communication, May 17, 2011). Rehling (2003), whose academic program underwent an external review in the early 2000s, testified to the value of the process: "an external review visit and report can transform attitudes toward our discipline, with corresponding status and power rewards, based on new understandings of our legitimacy and of the nature of students and studies (p. 71).

What contribution did the founders of the profession make to the development of adequate educational training and standards? One of TWE mission statements was "to advance the profession through … the establishment of professional college and university curricula for the training of technical writers and editors" ("TWE Constitution," 1955, p. 8). They recognized the pivotal role that college and university degree programs had played in the professionalization of other fields, and they viewed attributes such as a specialized body of knowledge and formal educational training as important to their effort to professionalize. Sweet (1957) was convinced that only universities could properly identify and hone technical communication's body of knowledge and adequately train practitioners. He was not alone in this belief. Richard Frehsee, the second president of TWE, summed up the thinking of many practitioners at the time:

> The question that has bothered many of us is just how do we become of age. It's not going to happen overnight—nor by wishing it were so. It is going to happen, I believe, through education and training. … the real solution lies with the educators, not through quick and dirty courses but in complete undergraduate programs. (Frehsee, 1957, p. 4)

Frehsee (1957) was confident that TWE had academia's ear and could provide consultation and assistance in creating bona fide degree programs in technical communication.

All of the early organizations had university professors in high positions, and these professors served as liaisons between practitioners and academia. TWE's nucleus group included at least one academic: John A. Walter, an English professor at the University of Texas and coauthor of a textbook titled *Technical Writing* (Mills & Walter, 1954). Although not a charter member of TWE, he was a member of TWE's executive board by 1955 ("Pioneer," 1990). Likewise, STW's nucleus group, located in Boston, included several academics, including John H. Mitchell of the University of Massachusetts (Mitchell, 1989). Paul H. Flint, a Tufts University professor, served as the second president of STW. In a report on the first year of his presidency, Flint (1955) listed the organization's education-related accomplishments: "We have … made preliminary contact with one university with a view to sponsoring symposia for leaders in the field, evening classes for practicing technical writers and summer school courses to prepare advanced undergraduates or recent graduates to begin as Technical Writers" (p. 1). On the West Coast, TPS was collaborating with one of its own Directors, English Professor Mitchell Marcus of Los Angeles State College, to create a graduate curriculum in technical publishing at that college ("30-unit," 1955). The involvement of these academics in the first technical communication organizations, along with other academics such as Jay R. Gould, W. Earl Britton, Christian K. Arnold, Herman M. Weisman, and Henrietta J. Tichy (Figure 9), helped to create the profession's first bridges between industry and academia.

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**Figure 9: English Professor Henrietta J. Tichy (1912–1994?), the first woman fellow of STC ("Two Fellows," 1968). The author of *Effective Writing for Engineers, Managers, and Scientists* (1966), Tichy taught technical writing and literature at Hunter College in New York City. Photo from the STC archives.**

TWE, STW, and TPS apparently had some success in "establishing" bona fide degree programs at colleges and universities. In the mid-1950s, STW worked closely with administrators at Simmons College, a woman's college in Boston, to create a four-year undergraduate degree program in technical writing. Students pursuing this degree, in effect, had to double-major in journalism and one of the following technical/scientific areas: electronics, chemistry, or biology ("Program," 1956). STW described its involvement as follows:

> … plans were not finalized until this past winter [1955–1956] after discussion between members of the School of Publications and practicing technical writers, members of the STW Boston Chapter Education Committee. Stimulated by the interest shown by these STW members and by their promise of cooperation, college officials approved immediate action on the new program. ("Program," 1956, p. 69)

Launched in fall 1956, the curriculum for the degree consisted of such courses as graphic arts, editing and publishing techniques, layout and design, and article writing, but no courses with the title "technical writing" or "technical editing" ("Program," 1956). The title of the degree was "Technical Writing and Publishing," however, rather than "Technical Journalism" (Simmons College, 1957, p. 41). Other colleges and universities (e.g., Iowa State, Kansas State) were offering bachelor's degrees in technical journalism at an earlier date (Cortelyou, 1958), but the Simmons program may be the first, nominally, in technical writing.

In 1958, Erwin Steinberg, an English professor, started an undergraduate degree program in technical writing and editing at Margaret Morrison Carnegie College, the women's college at Carnegie Institute of Technology (Carnegie Tech, now Carnegie Mellon University) in Pittsburgh (Figure 10). Steinberg had a working relationship with the TWE/STWE Pittsburgh chapter, and especially its vice-chairman H. C. McDaniel. Each year at Carnegie Tech, Steinberg and McDaniel "put together a full day of lectures and workshops on various aspects of technical writing one day a year" (Erwin Steinberg, personal communication, June 28, 2007). It is likely that Steinberg consulted McDaniel or the chapter about the curriculum for the Carnegie Tech degree. As the editor of the *Westinghouse Engineer* and the manager of a large group of technical communicators at Westinghouse, McDaniel was the center of technical writing activity in Pittsburgh during this period (Janis Ramey, personal communication, September 9, 2009).

**Figure 10: English Professor Erwin R. Steinberg (b. 1921) with the first students in the technical writing and editing program at Margaret Morrison Carnegie College. Left to right: Ellen Brady, Sara Shook, Sally Gannon, Steinberg, Janis Geisler (aka STC Fellow Janis Ramey), and Nancy Ferree. Reprinted from the *Pittsburgh Press,* October 1958.**

By 1960, only a few universities were offering degree programs in technical communication, but STWP's Education and Professional Development Committee (EPPC) was already discussing STWP-sponsored accreditation of such programs. The following passage comes from the minutes of the Nov. 4, 1960, STWP Board of Directors Meeting:

> A discussion was held concerning whether the EPPC should establish, on behalf of the society, realistic curricula standards for university degrees in technical writing, technical illustration, and other fields it may deem proper, and to recommend to the Board appropriate ways of determining whether these standards are being met by particular educational institutes so that the society can grant or withhold approval of curricula on this basis. (Berry, 1960, p. 6)

This initiative was obviously premature and did not bear fruit. At this early date, the profession lacked a well-developed, specialized body of knowledge and core competencies. As Rainey, Turner, & Dayton (2005) argued many decades later, "Only with a process of codification and certification will the profession be in a position to establish accreditation of academic programs" (p. 335).

The challenge of creating effective academic programs was bigger than the first generation of professionals had anticipated. For this reason, they did not succeed on the scale they had hoped. The cooperation between academics such as Flint and Steinberg on the one hand and practitioners such as Hickok (a former high school teacher) and McDaniel on the other was undercut by the general ill will between their camps. As Gould (1989) recalled, "In the early days, the 50s, technical writing and the technical writers were without much honor, especially in academic circles" (p. 169). The reverse was also true. During the merger negotiations between TWE and STW, a TWE member asked, "How can they [STW] have a man like Flint in their organization? He is an English professor" (TWE, 1956, p. 98). These attitudes posed a formidable obstacle to collaborative educational initiatives. A decade after the formation of TWE, Hamlett (1963) lamented that "Education has not answered the challenge for higher standards in preparing graduates for technical writing careers" (p. 22). Another decade later, Colby (1975) was complaining that Rennselaer Polytechnic Institute's graduate degree program in technical writing (which had been started in 1953, the same year that TWE and STW were founded) was the only academic program in technical communication that he really trusted.

We have continued to create academic programs in technical communication (more than 223 in 2011 by one count [STC, 2011]), but we have not succeeded in implementing uniform program assessment protocols or an accreditation system. There is evidence that industry desires such quality assurance when hiring university graduates in technical communication. Malcolm (1987) noted that a 1983 survey conducted by STC indicated that employers of technical communicators were interested in having STC vet and accredit academic programs.

### Legal Recognition

Another current issue in professionalization is government recognition of the profession. On January 25, 2010, STC issued a press release declaring that "STC Efforts Realized as U.S. Government Acknowledges Technical Writers as Distinct Profession." The press release was referring to the fact that the job title "Technical Writer" had been given its own chapter in the 2010 edition of the government's *Occupational Outlook Handbook*. By separating technical writers from other types of communicators, the U.S. government was acknowledging that technical writing had different requirements than other types of writing. According to the news release, this change was important because it gave technical communicators authoritative evidence to use in discussions with employers about the status of their profession (O'Sullivan, 2010).

Although the U.S. Bureau of Labor Statistics did not formally acknowledge technical writing as a distinct profession until 2010, governmental agencies have long recognized technical writing as a distinct activity and "technical writer" and "technical editor" as official job titles. The National Advisory Commission for Aeronautics (NACA), NASA's predecessor, had "Assistant Technical Editor" as an official job title as early as 1935 (NACA, 1941). That editor, Pearl I. Young (Figure 11), was a scientist by education who worked with NACA engineers on their reports, and in later years she taught in-house report writing courses, produced a style manual for NACA reports, and supervised an editing group of mainly women (Verniel & Douglas, 1996). Thus, Young was one of the first—if not *the* first—U.S. government employees with the job title "Technical Editor" in the modern sense.

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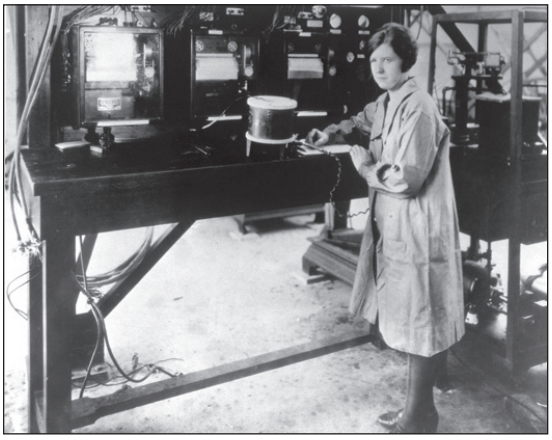

**Figure 11: Pearl I. Young (1895–1968), a technical editor and later manager of a technical editing group at the Langley and Cleveland fields of the National Advisory Commission on Aeronautics, the predecessor of NASA (Verniel & Douglas, 1996). Having majored in physics, chemistry, and mathematics at the University of North Dakota, Young began her NACA/NASA career as a laboratory assistant (as pictured above) and was promoted to junior physicist before moving into editing (c. 1930) (NACA, 1941). She is the eponym of the Pearl I. Young Theater at NASA's Langley Research Center (NASA, n.d.). Public domain photo from NASA.**

The *Dictionary of Occupational Titles*, published by the U.S. Employment Service in four major editions (and many supplements) between 1939 and 1991, sheds light on the emergence of the government job title "Technical Writer" in the post-World War II era. The first edition of the dictionary, published in 1939, did not include "Technical Writer" at all, but it did include "Editor of a Trade or Technical Publication":

> **Editor, Trade-or-Technical Publication** (print & pub.) 0-06.53. Edits a trade or technical publication: accepts or rejects material; writes editorials and special articles, maintaining editorial policy of publication; makes field trips in search of new practices or first hand information on conditions; consults advisers on trade or technical questions; edits material; plans lay-out and checks and approves final proofs of issue. (U.S. Employment Service, 1939, p. 316)

As a job title, "Technical Writer" made its debut in a 1943 supplement to the first edition of the dictionary: "Technical Writer (profess. & kin.) see Writer, Technical Publications" (U.S. Employment Service, 1943, p. 320). The entry for "Technical Publications Writer" read as follows:

> **Writer, Technical Publications**; ordnance engineer; technical writer (profess. & kin.) 0-06.90. Prepares technical manuals, bulletins, and other publications dealing with subjects, such as improvements in electrical and mechanical equipment and services, and the assembly, use, maintenance, repair, and transportation of ordnance materials: consults workers engaged in developing new equipment and in making improvements, and other sources, such as blueprints, trade and engineering journals, and manufacturers' catalogs, to acquire or verify technical knowledge of subject; selects, organizes, edits, and rewrites articles, bulletins, manuals, or other materials dealing with general and particular phases of subject; directs preparation of illustrative materials, such as photographs, drawings, and sketches. May specialize in a particular phase of technical writing, such as use, repair, and maintenance of firearms, or tanks, or the application, theory, installation, and operation of telephone and telegraph equipment. (p. 352)

Note that the occupation is classified as "profess. & kin." Thus, as early as 1943, the U.S. government formally recognized "Technical Writer" as belonging to a group of "professional and kindred occupations"—that is, occupations requiring specialized study and training.

Sweet (1957) noted that many technical communicators in the 1950s took great comfort from the fact that government agencies such as the Bureau of Census and the Federal Security Agency listed the technical writer as a professional worker; however, as Sweet (1957) also pointed out, these agencies recognized the billiard player, jockey, dog trainer, freak, masseur, gambler, fortune teller, animal impersonator, yodeler, and stooge as professional workers (p. 65)

The history of the struggle for legal (i.e., judicial) recognition of the profession extends back to at least 1957, when a U.S. federal court ruled that a technical writer was a professional under the U.S. Department of Labor's Wage and Hours Act and therefore exempt from receiving time-and-a-half pay for overtime work.

From January 1955 to July 1956, David Rothstein worked as a technical writer for Cannon & Sullivan Technical Publications in Los Angeles. He created technical handbooks from engineering data presented on blueprints and was also in charge of deciding what artwork was needed and ordering it. In adjudicating his lawsuit, the court found that "The type of work performed by a technical writer is predominantly intellectual and creative, rather than routine," requiring "judgment or discretion," and that Rothstein was "a bona fide professional employee" (Rothstein, 1957). In other words, the court ruled against Rothstein, who did not want to be regarded as a professional in the Wage and Hours Act sense because it meant less pay for overtime work.

Similarly, the profession received legal recognition from the U.S. Immigration and Naturalization Service (INS) in the early 1980s. In 1979, a technical publications writer from India was denied "preference status" to immigrate to the United States when an INS District Director decided that he did not belong to a professional occupation. The company that wanted to hire the writer filed an appeal, and the case was sent to a Regional Commissioner, who ruled c. 1980 that technical writing was a professional occupation because entry into the occupation typically required a bachelor's degree from a university. STC's Executive Director had solicited statements to that effect from three editors in the field and an academic program director and submitted them to the petitioner's attorney, and apparently this testimony swayed the INS official. Commenting on the INS's ruling, the editor of STC's *Technical Communication* declared that "Technical Writers [were] Legally Professionals Now" (Smith, 1981, p. 3).

## Conclusion

Professionalization has been a long-term project that has included achievements as well as setbacks and delays. If nothing else, our history teaches us to be cautiously optimistic about those achievements. Many times in the past we have felt confident that mature professional status was just around the corner, only to discover that it was farther away than we thought. It is easy to exaggerate or overestimate an accomplishment in the satisfaction of the moment, particularly when we lack a strong historical consciousness as a profession. Although it would be wrong to describe professionalization as a Sisyphean task, it has been a frustrating one so far. Our appraisal of our gains must be tempered by a certain amount of realism and an awareness of the history of the professionalism movement in technical communication.

The recent achievement of a measure of legal recognition by the U.S. Bureau of Labor Statistics (BLS) is a case in point. We have been trumpeting the government's recognition of technical writing as a profession—or at least a professional activity—since the 1950s, but what has that recognition really done for the technical communicator's professional status? Although persuading the BLS to segregate technical writing from other forms of writing in its Occupational Outlook Handbook was an accomplishment, it was not the accomplishment that STC had set its sights on achieving. STC was trying to persuade the BLS to replace the term "technical writer" and its narrow implications with the term "technical communicator" and its much broader implications (Martin & O'Sullivan, 2010). The fact that the BLS did not recognize "technical communication" as the name of our profession more than 40 years after the profession itself officially embraced that term should give us pause.

Although the unification of technical communication organizations in the late 1950s and early 1960s has given way to a multiplicity of technical communication organizations in the 21st century, and at least one technical communication professor believes that we are "diluting our efforts" with "too many organizations" (as cited in Carliner, 2003, p. 95), there may still be cause for optimism. We should view the creation of organizations such as ATTW and CPTSC and international organizations of technical communicators in places like Australia, Japan, Germany, France, and Switzerland as evidence of the profession's continued growth and relevance over the years. In recent decades, there have been attempts to achieve greater cooperation, if not unification, among these organizations. In the 1990s and early 2000s, for example, representatives of the major technical communication organizations met annually for an informal Summit of Technical Communication Organizations (Carliner, 2003). TCeurope and Intecom are international umbrella organizations that foster cooperation among national organizations.

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There has also been some cross-pollination among the U.S. organizations. Several STC fellows are officers or directors of IEEE PCS, ATTW, and CPTSC. A former president of STC is now the editor of the *IEEE Transactions on Professional Communication*.

As early as 1960, STC discussed the feasibility of creating an internal system for accrediting academic programs (Berry, 1960); more than 50 years later, however, we still do not have an accreditation system in place. The unsuccessful attempt of IEEE PCS to create such a system in the 1990s underscores the difficulty of the task. Although it has been helpful to several programs, CPTSC's Program Review service does not provide the kind of quality assurance that might come from ABET accreditation, for example. Nor was it ever intended to do so. Nevertheless, important progress is being made in developing and assessing student learning outcomes in technical communication programs. Scholars have developed a sizable corpus of assessment literature in technical communication, and CPTSC now offers an annual Award for Excellence in Program Assessment (CPTSC, 2008b) in connection with the CPTSC Research Assessment Project (Coppola, 2008).

One important sign of the discipline's maturation is the interest it has shown in the study of ethics in recent decades. Although organizations such as ATTW (2011) and STC (1998) have codes of ethics to guide members in their professional practice, we no longer view these codes (if we ever did) as sufficient by themselves to foster ethical behavior. We seem to have a better understanding of the motivations and mechanisms behind such behavior—if the amount of literature on the subject is any indication. There has been a proliferation in the literature about ethics in technical communication scholarship since 1970 (Dombrowski, 2000a, p. 4). Introductory textbooks in technical communication usually include a section or chapter about ethics. For example, Anderson (2010) integrated "Ethical Guidelines" throughout his textbook. There are several books devoted to ethics in technical communication (Allen & Voss, 1997; Brockmann, 1989; Dombrowski, 2000b; Markel, 2001). Undergraduate and graduate curricula in technical communication often include modules, if not entire courses, in ethics.

Finally, significant progress seems to have been made in the areas of certification and body of knowledge. Recent achievements in these two areas are grounds for being optimistic about the profession's future. STC's implementation of a certification system for technical communication professionals this year represents the culmination—and in some respects, the achievement—of many years of hard work. It may not be all hyperbole to say that "A Monumental Day Dawns for Technical Communicators" (Jong, 2010, p. 6). We will have to watch closely to see whether certification changes the employment landscape and the public's perception of the profession. In the 60 years that have passed since technical communicators created the first professional organizations and journals in technical communication, the profession has had time to develop a specialized body of knowledge and create outlets (e.g., professional conferences and journals) for documenting, exploring, and critiquing it. As a framework and portal, STC TCBOK promises to make that body of knowledge accessible to anyone who wishes to know what technical communication is and what technical communicators do.

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Manuscript received 23 February 2011, revised 18 May 2011, accepted 3 August 2011.

# Glorified Grammarian or Versatile Value Adder? What Internship Reports Reveal About the Professionalization of Technical Communication

Janel Bloch


## Abstract

**Purpose:** To compare and contrast the experiences of technical communication interns over recent decades as they relate to the progress toward the professionalization of technical communication.

**Methods:** Exploratory thematic analysis of 15 detailed graduate student internship reports (1984–2009) based on five professionalization issues: educational background, identifiability of technical communicators, status, demonstrating value added, and professional consciousness.

**Results:** Interns across the entire time range faced professionalization issues. Regarding education, the need for technical communicators to possess specialized subject-matter knowledge is becoming even more essential in this age of distributed work and could be addressed within the technical communication curriculum by more consistently requiring minors or double majors in specialized fields. The study also shows a continuing lack of awareness of the technical communication skill set; the Technical Communication Body of Knowledge project is progress toward professionalizing the skill set. Additionally, status issues and the need to add value were persistent challenges for the interns. Educators should avoid conditioning technical communication students to expect low job status and help them find the right organizational fit, actively promote themselves, and be financially aware. The professional consciousness of technical communicators seems to have eroded over time, as the overlap with other fields may hinder technical communication from becoming an easily differentiable profession, although the Technical Communication Body of Knowledge project and STC's move toward certification may assist in this regard.

**Conclusions:** Several recommendations are offered for interns, employers, and faculty to help interns be perceived as professionals and to improve the professionalization of technical communication as a whole.


**Keywords:** internships, professionalization, graduate programs, status

# Glorified Grammarian or Versatile Value Adder?

**Practitioner's Takeaway**

- Employers of technical communication interns should carefully match interns with positions to fully use their skills, considering issues such as subject-matter expertise and fit with organizational culture.
- Employers of technical communication interns should be prepared to provide adequate feedback, help them with networking, and coach them to be self-advocates.
- Technical communication interns must be prepared to be entrepreneurial and financially savvy and to seek opportunities to demonstrate their value in tangible ways.
- Practitioners should maintain contact with academic programs in technical communication, which continually seek internship opportunities for students.

## Introduction

The media often broadcast "technical writer" as a promising career choice. In fact, *U.S. News & World Report* ranked "technical writer" as "one of the 50 best careers of 2011" (Newman, 2010). However, students interested in technical communication careers still struggle with identifying opportunities and adapting to their first position. To help ease this transition, many technical communication programs offer course credit for internships, and some include them as a degree requirement (Savage & Seible, 2010). Internships can benefit all involved: Students obtain experience and a chance to apply their academic knowledge, employers see what students can offer, and faculty stay connected with workplace needs. As Munger (2006) puts it, internships can be "win-win-win situations" (p. 336).

An important part of internships is for students to reflect on connections between the work done on the job and the knowledge learned in school. This reflection can be prompted by activities such as keeping journals and participating in class discussions during the internship and also by writing a comprehensive report upon completing the internship (e.g., Tovey, 2001, p. 232). In graduate-level technical communication programs, this report can be equivalent in length and rigor to a master's thesis, complete with a faculty supervisory committee.

This article discusses my exploratory study of the detailed internship reports of students in a technical communication master's degree program. These reports from 1984 to 2009 chronicle the experiences of students working in a variety of technical communication-related positions.

My study addresses two gaps in the literature. The first is the lack of narratives of technical communicators' work experiences, which Savage and Sullivan (2001) identified and began to address in their collection *Writing a Professional Life: Stories of Technical Communicators On and Off the Job*. Second, as these internship reports cover the past quarter century, I address the need for longitudinal studies of technical communicators' work (Rude, 2009). These reports, taken together, provide a look at trends, or lack thereof, in the professionalization of technical communication and offer a unique opportunity to compare and contrast experiences over time. I conclude with recommendations for interns, employers, and faculty.

## Methodology

The internship reports in this study were written by students in the Master of Technical and Scientific Communication (MTSC) program at Miami University in Oxford, Ohio. This program began in the mid-1980s and, as Anderson (1984) explains, was designed around a "problem-solving model" (p. 163) that reflected the need to devise creative strategies to address the variety of situations technical communicators face in the workplace. By developing this problem-solving mind-set, students were prepared "not only for entry-level positions as writers and editors, but also for rapid advancement in the profession" (Anderson, p. 165). Students were required to complete an internship, following detailed requirements for both employers and students (see Miami University, 2004a, 2004b). The internship could take various forms, such as a summer

internship or a designated portion of a full-time job, and it was often the student's first professional work experience.

To get academic credit for the internship, students were required to write a detailed report approved by a faculty committee. Students submitted the approved report to Miami University's library to be publicly available, just as is done for a thesis or dissertation. They were aware of four audiences: future MTSC students, their faculty committee, their internship colleagues, and "a very nebulous fourth audience"—anyone obtaining the report through Miami University's library (Miami University, 2004b, p. 6).

The content and organization of these reports were delineated quite clearly (Miami University, 2004b):

- A description of the employer and how the intern fit into its organizational structure
- A general overview of the intern's work
- A detailed description of the intern's work on a major project
- The intern's reflection on the internship, relevant to topics studied within the MTSC program.

To help ensure the value of the internship to all concerned, interns were required to have a statement signed by the employer and the faculty committee verifying that the internship involved "professional work appropriate for someone who has completed at least one year of graduate study in technical and scientific communication" (Miami University, 2004b, p. 2). Employers agreed to give interns an appropriate orientation and to provide two evaluations.

Interns were also required to have both a supervisor within the organization and a "writing mentor" who could "teach, advise, and evaluate" them regarding workplace writing (Miami University, 2004b, p. 4). The supervisor and the mentor could be the same person but need not be. For example, a student in a "lone writer" position would need an external writing mentor.

This collection of internship reports provides a valuable data set of firsthand accounts of the work of technical communicators that can be used in examining issues pertaining to the professionalization of technical communication. Specifically, this set of reports does the following:

- Provides detailed accounts of technical communication work experiences
- Includes samples of work in (often lengthy) appendices
- Spans a wide range of time, 1984–2009, allowing for a kind of longitudinal study
- Represents a variety of internship situations in different technical areas, including technological, medical, scientific, and environmental.

For this exploratory investigation, I selected 15 reports, from the more than 200 available, to examine in detail—approximately half from the beginning and middle years of the time range, and the rest from more recent years. I chose more reports from recent years to reflect the present status of the field and to offer insights for making recommendations, and I selected reports representing a variety of internship situations and subject-matter areas. Because the reports varied in the details offered, I chose reports that addressed the five professionalization issues discussed in the remainder of this article.

My university's Institutional Review Board determined that the requirements for human subjects research are not applicable to this study because all the reports are publicly available. Full citations for the reports are listed in Appendix A. Table 1 summarizes the reports analyzed for this article. To emphasize the years rather than the authors throughout this article, the reports and the interns are referred to by year and number rather than by the author's name.

## Professionalization Issues

Technical communication has long struggled with professionalization issues. The two volumes of *Power and Legitimacy in Technical Communication* (Kynell-Hunt & Savage, 2003, 2004) include 20 articles, and related pieces have appeared in this journal on a regular basis. I have identified within these discussions five common themes that also appear in the reports in my study: (1)

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**Table 1: Summary of Internship Reports Examined for This Study**

| Title | Year and Number | Organization |
|---|---|---|
| Technical Writer | 1984-01 | Technical Communications Department of a large electronic data-processing company |
| Medical Writer | 1984-02 | Medical Affairs Department of a large pharmaceutical company |
| Technical Publications Writer/Editor | 1985-01 | Neurotoxicology Division, U.S. Environmental Protection Agency |
| Technical Writer | 1994-01 | Risk Management Business Unit of a newly merged software company |
| Part-time Assistant Medical Writer | 1995-01 | Regulatory Services Department of the pharmaceutical division of a large consumer products company |
| Technical Writer | 1995-02 | Small consulting firm providing services such as training, documentation, technical artwork, and simulations |
| Technical Writer | 1995-03 | Small technical communication consulting firm with large corporate and government clients |
| Technical Writer/Editor | 2004-01 | Document Development Branch Editorial Team, Education and Information Division, National Institute for Occupational Safety and Health |
| Technical Writer | 2004-02 | Web-Based Learning team in Information Systems and Services Department of a large grocery retailer |
| Study Analyst/Report Writer | 2004-03 | Study Analysis and Reports Department of a large contract scientific research organization |
| User Services Analyst | 2004-04 | Small software company |
| Technical Communicator/Trainer | 2007-01 | Small consulting company |
| Technical Writer | 2009-01 | Office of an international ground engineering and environmental consulting firm |
| Community Health Worker | 2009-02 | Community health center in an economically disadvantaged area |
| Instructional Design Senior Analyst | 2009-03 | Content Development Center of a division of a global management consulting, technology services, and outsourcing firm |

educational background; (2) identifiability; (3) status; (4) demonstrating value added; and (5) professional consciousness. Each of these themes is explained below.

## Educational Background

The existence of academic programs in a field contributes to professionalization, as Kynell-Hunt (2003) discusses in explaining how engineering improved its status as a profession. In 1995, Zimmerman and Muraski recommended that more technical communicators pursue educational opportunities specifically related to technical communication and observed, "Less than 20% of STC's members reported having degrees in technical communication. Most have degrees in English, journalism, social sciences, or scientific, engineering, or technical fields" (p. 621). As with engineering and medicine, careers in technical communication preceded academic programs, and only in recent decades have degrees in technical communication become widely available. Even now, it is possible to become a technical communicator with a degree in another field, and existing technical communication degree programs have differing requirements. This variation in education has

been simultaneously advantageous and problematic (Harner & Rich, 2005; Meloncon, 2009; Rainey, Turner, & Dayton, 2005; Wilson & Ford, 2003).

### Identifiability

Another aspect of professionalization repeatedly noted in the literature is that technical communicators are sometimes difficult to identify, and when they are identified, there is no clear understanding of what they can do (Giammona, 2004; Hayhoe, 2003; Jones, 1995). This lack of identifiability indicates the absence of "market closure," which Savage (1999) argues is a characteristic of true professions: An occupation with market closure has an "identifiable status in the marketplace, to the exclusion of other occupation groups who would offer or claim to offer comparable services" (p. 357). The long-debated issue of a professional certification for technical communicators (Turner & Rainey, 2004) is directly associated with this theme as well.

### Status

The literature includes much ongoing discussion about the low status and perceived dispensability of technical communicators in the workplace (Giammona, 2004; Hayhoe, 2003; Myers, 2009). According to Spilka (2000), "technical communicators are often undervalued and perceived as grammarians only. They are often on the lowest rungs of the corporate ladder and the first to be laid off when company finances become shaky; and they are rarely viewed as corporate leaders" (p. 219).

### Demonstrating Value Added

The literature has frequently discussed the need for technical communicators to be proactive in demonstrating their value, which is not readily apparent in traditional accounting measures (Redish, 1995). According to Sherri Michaels, a technical communicator with decades of experience, technical communicators are "unknown and unseen asset[s]" and "To have an impact, we need to be more opportunistic, to imbed ourselves in the core functions of our organizations—improving sales revenue, reducing risk, or increasing product acceptance" (qtd. in Myers, 2009, pp. 8–9). Technical communicators need to use their rhetorical skills to demonstrate—in ways that are meaningful to their colleagues—the value they provide. Once this groundwork is established, they should be more likely to be the "change agents" that Hughes (2002, p. 284) believes they are capable of being and instigate the "social change" that Kynell-Hunt (2003, p. 61) argues is necessary for the technical communication field to harness the power to truly achieve professional status.

### Professional Consciousness

Compared to those with more established professions, technical communicators are not as individually or collectively connected to the field (Savage, 1999). The recent developments in the Technical Communication Body of Knowledge project (Coppola, 2010) are a step in the right direction toward establishing a common knowledge base to which all technical communicators can connect.

## Analysis of Internship Reports

The following discussion examines the professionalization themes identified above as they appear in the selected internship reports. Subsequent reflection details what this analysis indicates about the movement toward the professionalization of technical communication.

### Educational Background

The MTSC program was established in the mid-1980s, as the number of degree programs in technical communication was beginning to grow (Anderson, 1984, p. 160). It included courses focused specifically on technical communication, along with others in related topics such as rhetoric, editing, linguistics, visual design, organizational communication, and management. The MTSC program also required students to take graduate-level coursework in a specialty area (e.g., medical, environmental) and to complete an internship in that same area. Table 2 summarizes the educational background (in addition to the MTSC coursework) of the internship report authors and the experience of their immediate coworkers.

Table 2 may reflect the changing nature of technical communicators' work environments resulting from the trend toward distributed work, a concept embedded in popular terms such as "the new economy, "the knowledge economy," or "the hyperlinked organization" (Spinuzzi, 2007, p. 266). As Spinuzzi (2007) explains,

# Glorified Grammarian or Versatile Value Adder?

**Table 2: Summary of Educational Background of Intern and Experience of Coworkers in Given Work Situations**

| Year | Organization | Additional education of intern | Work situation and coworker experience |
|---|---|---|---|
| 1984-01 | Technical Communications Department of a large electronic data-processing company | Graduate business courses | Member of a Technical Communications Department where coworkers had varying degrees of education and experience; some had no experience but had recently completed degrees, while others had much experience, but no formal training in technical communication. |
| 1984-02 | Medical Affairs Department of a large pharmaceutical company | Undergraduate biology degree | The only medical writer on a single team consisting of a physician, a clinical researcher, a statistician, and an administrative assistant. One other medical writer served all product teams. |
| 1985-01 | Neurotoxicology Division, U.S. Environmental Protection Agency | Undergraduate English and journalism degree with graduate courses in chemistry and biology | The only technical communicator—reported to the division director and supported scientists/researchers. |
| 1994-01 | Risk Management Business Unit of a newly merged software company | Unspecified | The only technical communicator on a 15-member product team of developers and specialists in quality assurance, management, and sales. |
| 1995-01 | Regulatory Services Department of the pharmaceutical division of a large consumer products company | Had worked for the company as a research associate for 3+ years | Member of a team developing a new drug application; the only writer on the team; there appeared to be writers on other teams, but no formal medical writing group. |
| 1995-02 | Small consulting firm providing training, documentation, technical artwork, and simulations | Unspecified | Worked with two other consultants—one with a MTSC degree, and the other working on an instructional design degree. Clients had manufacturing and engineering backgrounds. |
| 1995-03 | Small technical communication consulting firm | Unspecified | Worked with other consultants having graduate degrees in technical communication. Clients typically had backgrounds in engineering or environmental science. |
| 2004-01 | Document Development Branch Editorial Team, Education and Information Division, National Institute for Occupational Safety and Health | Unspecified—had some science graduate courses, but not a strong science background | Worked with other writer/editors (unspecified educational background), some with many years of experience. Also worked with an occupational chemist subject-matter expert. |
| 2004-02 | Web-Based Learning team in Information Systems and Services Department of a large grocery retailer | Undergraduate computer science degree | The only technical writer on team, with a group leader, group manager, and three developers. |

| Year | Organization | Additional education of intern | Work situation and coworker experience |
|---|---|---|---|
| 2004-03 | Study Analysis and Reports Department of a large contract scientific research organization | Undergraduate science degree | Worked with other study analysts with unspecified backgrounds. |
| 2004-04 | Small software company | Unspecified | Worked with other technical communicators with bachelor's or master's degrees in technical communication. |
| 2007-01 | Small consulting company providing services such as creating software applications and designing data warehouses | Unspecified | The only technical communicator—worked with consultants with a variety of backgrounds, such as computer science and database management. |
| 2009-01 | Office of an international ground engineering and environmental consulting firm | Unspecified | The only technical communicator in this office—many colleagues had engineering and technology backgrounds. |
| 2009-02 | Community health center in an economically disadvantaged area | Unspecified | Worked with the medical director and other medical personnel. No coworkers with training in technical communication. |
| 2009-03 | Content Development Center of a division of a global management consulting, technology services, and outsourcing firm | Unspecified | Worked with other consultants with training in instructional design. |

distributed work results from "the fundamental shift in work organization away from the stable, rationalized, modular work structures that characterized the Industrial Revolution and toward less stable, more interpenetrated work" (p. 266). Perhaps indicative of this shift away from "modular work structures," the only intern in the sample who worked in a department called "technical communications" was 1984-01. In the 1980s, as the computer industry was developing, more organizations employed multiple full-time technical writers, sometimes having separate departments for them. Eventually, many of those technical communications departments gave way to outsourcing and rightsizing. As can be seen in Table 2, most of the other interns were among few writers employed by their organization. Indeed, six of the interns were lone writers (1984-02, 1985-01, 1994-01, 2004-02, 2007-01, 2009-01). An exception may be 2009-03, but this intern was employed by a consulting firm and thus worked for a variety of clients (i.e., "less stable, more interpenetrated work").

Table 2 seems to also reflect the increasing availability of specialized study in technical communication. Intern 1984-01 was also the only one mentioning difficulty working with technical communicator colleagues who lacked academic training in the field. Interestingly, this intern describes efforts to arrange additional training for these colleagues and how these efforts were met with resistance. Although other interns worked with technical communicator colleagues, many of these coworkers had advanced academic training in technical communication (1995-02, 1995-03, 2004-04).

The interns' graduate education seems to have served them well in initially finding a position in the workplace. In addition to communication-related courses, the MTSC program required graduate-level coursework in a subject-matter area related to the internship. A lack of subject-matter knowledge can sometimes detract from a technical communicator's perceived professionalism; a number of interns indicated that subject-matter expertise was extremely helpful to

# Glorified Grammarian or Versatile Value Adder?

**Table 3: Summary of Work Done by the Interns**

| Year | Representative work done by the intern |
|---|---|
| 1984-01 | Interviewed colleagues in various areas and created technical documents for both technical and nontechnical audiences—mainly for internal use<br>Edited the work of colleagues in Technical Communications and other departments<br>Created order management forms and other documents for internal projects<br>Transferred files from one system to another |
| 1984-02 | Prepared communications addressed to the Food and Drug Administration<br>Helped researchers prepare scientific journal articles and poster presentations<br>Edited advertising copy |
| 1985-01 | Wrote standard operating procedures (SOPs) on experiments routinely performed and developed a system for writing, editing, formatting, and maintaining the SOPs<br>Wrote a brochure describing the purpose, research, and goals of the organization<br>Provided writing and editing support as needed |
| 1994-01 | Created a complete draft of a user's guide<br>Designed, wrote, edited, and produced a set of documentation<br>Assisted the business unit manager with marketing, conference, and customer communications<br>Did status report newsletters, edited an ad for *American Banker*, edited presentations for banking conferences, and revised marketing brochures |
| 1995-01 | Wrote and edited a clinical investigator's brochure<br>Wrote and formatted guidelines and descriptions of the information required in a new drug application (NDA)<br>Wrote and edited two-page summaries of articles with data supporting the NDA |
| 1995-02 | Did technical research, writing, editing, and desktop publishing for instructional design projects for a large equipment manufacturer |
| 1995-03 | Edited and wrote an annual site report for an environmental cleanup project<br>Developed two training kits for groups within a large consumer products company<br>Managed one small project<br>Developed computer-based training (CBT)<br>Attended proposal meetings to market the firm's CBT development services |
| 2004-01 | Wrote and designed a brochure about skin exposure to chemicals<br>Edited an occupational safety and health program and system effectiveness report<br>Created a large poster to present scientific information from a white paper<br>Edited and animated a PowerPoint slideshow |
| 2004-02 | Helped plan, edit, design, and revise content for a web-based training course<br>Developed application simulations<br>Created a newsletter to broadcast the newly created department's activities and services |
| 2004-03 | Analyzed data and wrote reports using software packages and databases—involved the entire writing process—including revision<br>Comprehensively coedited a textbook chapter<br>Created graphics for coworkers |

| Year | Representative work done by the intern |
|---|---|
| 2004-04 | Documented the firm's latest software application, including writing online help and creating online demonstrations for the application |
| 2007-01 | Updated the organization's website<br>Created user and system documentation for a proprietary application<br>Developed timelines, status reports, and checkpoints |
| 2009-01 | Prepared a large report for a major client<br>Prepared construction quality assurance reports and marketing information, including statements of qualifications and templates<br>Updated the office intranet site<br>Prepared environmental impact assessments, conducted independent research, prepared permit amendments and modifications<br>Conducted résumé reviews for the firm's book of consultants' résumés |
| 2009-02 | Developed and wrote the content needed to expand the clinic's website<br>Redesigned the clinic's informational brochure<br>Worked on two grants<br>Wrote health dialogue scripts for the clinic's health care workers to use in interacting with patients |
| 2009-03 | Developed an online training course<br>Developed other low-end and high-end instructor and web-based training<br>Did audience analysis, gathered information from subject-matter experts, and prepared/reviewed deliverables |

them in relating to coworkers in other fields (1984-02, 2004-01, 2004-02). Others indicated that even more technical knowledge would have been helpful (1984-01, 1985-01, 2009-01).

### Identifiability

Several of the interns encountered colleagues or other professionals who did not identify technical communication as a separate profession and who were unsure of what technical communicators do. Table 1 includes a variety of job titles, which seem to shift away from "technical writer" or "technical communicator"; this shift may indicate movement away from market closure (Savage, 1999). While further analysis of the entire set of reports would be needed to substantiate the shift, this finding is echoed by Rainey, Turner, and Dayton (2005, p. 325), who found that the 67 technical communication managers they surveyed used 16 different titles, and by Lanier (2009, p. 53), who studied employment advertisements for technical communicators.

However, Savage (1999) also argues that "a common market-controlling strategy in professionalization is for practitioners to work for clients, rather than employers" (p. 365). Table 2 indicates that, despite the variability of job titles, technical communication may actually be moving toward market closure in this respect, because 6 of the 15 interns worked for consulting firms or contractors (1995-02, 1995-03, 2004-03, 2007-01, 2009-01, 2009-03), and more of these situations were in recent years.

Another indicator of market closure is producing work different from those in other professions. Zimmerman and Muraski (1995) observed that although technical communicators are asked to produce a wide variety of documents, "they may not have the requisite interviewing, organizing, writing, copyediting, proofreading, analyzing, illustrating, conducting usability assessments, and computer skills" (p. 622). The reports show that these interns were indeed able to produce many kinds of documents and *did* possess the necessary complex skills, which likely came from the

academic background provided in the master's program, often coupled with the intern's subject-matter expertise. Table 3 illustrates the kinds of documents produced and the skills applied in producing them.

As Table 3 shows, the interns produced a wide variety of documents and used many different skills, such as writing; editing; design; audience analysis; interviewing; and even project management, marketing, negotiation, and sales.

## Status

To examine the status issues the interns faced, I searched their reports for themes relating to respect, value, support, and trust and found that the interns articulated two kinds of status issues: those related to being interns and those related to being technical communicators.

**Status Issues Related to Being Interns** Status issues common to interns included lack of cooperation from colleagues or clients and insufficient management support.

*Lack of cooperation from colleagues or clients.* Because interns are new on the job, getting cooperation and respect from colleagues or clients is inherently a challenge (Sitts, 2006). For the interns in my study, this problem was exacerbated by the nature of their work, because many of their colleagues or clients were subject-matter experts (SMEs) from whom the interns needed information. For example, intern 1984-01 struggled to get programmers to find the time to meet with him because they viewed it as taking away from time that could be spent programming. Similarly, intern 1985-01 was assigned to write SOPs mandated by upper management, but the scientists she needed to work with were not motivated to assist her because in their high-pressure "publish or perish" environment, they preferred to spend their time on research. Some interns seemed frustrated and upset by having requests for information met with delayed, minimal, or no response (1985-01, 1994-02), while others took the situation as a given and adjusted. For example, interns 1995-01 and 2009-02 attributed the delays to timing issues that were simply part of the process.

*Insufficient management support.* A perceived lack of management support is also common to interns in general. In their empirical study of the internship satisfaction of 261 undergraduate business students, D'Abate, Yount, and Wenzel (2009) found that the availability of feedback and mentoring from supervisors affected an intern's overall contentment (p. 534). This finding held true in my study as well. Some of the interns mentioned being expected to carry out complex projects without supervisory support. For example, intern 1984-01 was assigned to write a document that upon further investigation (while the supervisor was away),was determined not to be needed, and intern 2004-03 felt a "sense of abandonment" (p. 29) when her supervisor took an extended leave, providing little instruction on how to proceed during this absence. Intern 1985-01, who was trying to write management-mandated SOPs, believed that her supervisor should have intervened more on her behalf, saying, "if the importance of my work had been communicated … by the Director rather than by me, the [research scientists] might have taken their part in my assignments more seriously" (p. 59).

**Status Issues Related to Being Technical Communicators** Other status issues within the reports relate specifically to the nature of the technical communication field: expectations of low status, lack of subject matter knowledge, and differences in goals.

*Expectations of low status.* Interns at both ends of the time range reported being advised to expect to encounter problems with status—not because they were interns, but because they were technical communicators. For example, the colleagues of intern 1984-01 explained that "gaining respect and cooperation from professionals such as systems analysts was a problem throughout the technical writing profession" (p. 64). And several years later, intern 2007-01 wrote that she learned in graduate school that "the role of the technical communicator is for the most part underappreciated" (p. 49). Perhaps technical communicators are being conditioned to expect this situation, thus creating a self-fulfilling prophesy.

*Lack of subject matter knowledge.* Technical communicators are sometimes perceived to have a "lack [of] sufficient technical or scientific background in the eyes of technical and scientific colleagues" (Zimmerman & Muraski, 1995, p. 622). For example, intern 1984-01 indicated difficulty in getting a programmer to meet with him, and then when they finally met, experiencing problems because of the difference in subject matter

knowledge. Intern 1985-01, a lone writer working with scientists in a research organization, felt inherently lacking in status because she did not share their background, and observed that they "seem to have little interest in or patience with people who do not 'speak the language' of professional scientists, particularly neuroscientists" (p. 53). Most of the interns, however, rather than being hampered by a lack of knowledge, took steps to remediate it by investing significant time in learning more about the subject matter, the project, or the organization.

*Differences in goals.* Often status issues seemed to result from differences in goals between the technical communicators and their colleagues or clients. For example, the research scientists who worked with intern 1985-01 were not motivated to help her with her project because they did not see the SOPs she was writing as essential to their work. Yet when she offered editing services, they were much more enthusiastic about working with her because editing related directly to their own professional goals. Clients sometimes have different goals as well. As an audience-centered technical communicator, intern 1995-03 strove to prepare high-quality documents; however, she sometimes found that a client was not interested in her suggestions and just wanted a "finished product to show his/her boss or to complete an agreement" (p. 29). At the same time, this intern found that other clients did demand quality (p. 30). Given these important differences in client motivations, she soon learned to view the client as an important primary audience whose needs often took precedence over those of the actual users of the communication.

Not all technical communicators have status issues. While none of the interns in my study reported flourishing to the extent of the new technical writer whose coworkers made her feel like a "goddess," (Rutten, 2001, p. 43), some did report minor triumphs. Intern 1984-02 describes a successful internship as an embedded medical writer on a product team. Intern 2004-02, while initially feeling that his colleagues had a limited understanding of his role, describes successfully teaching them what he could do.

## Demonstrating Value Added

Sometimes technical communicators are in positions in which there is a question of whether they are needed at all. Interns in this type of situation included 1984-02 (employed by an organization that had one medical writer but was contemplating hiring more writers and embedding them on teams, as was done with this intern); 2004-02 (hired as the first technical communicator on a new team); and 2009-01 (working for a consulting firm that was evaluating the need for a permanent technical communicator). The interns in these test case roles seemed especially motivated to demonstrate that they could add value. As intern 2009-01 stated, "I knew that virtually everyone in the office viewed my role as superfluous and a type of added luxury" (p. 54).

In identifying the strategies the interns used for demonstrating value and, in turn, laying the groundwork for effecting the change that could ultimately enhance the professionalization of the field, I looked in the reports for discussion around themes such as adding value, measuring costs, and self-promotion. Three areas appear to contribute to the ability to demonstrate value: organizational fit, proactive self-promotion, and financial awareness.

**Organizational Fit** To "move from the periphery," Sullivan, Martin, and Anderson (2003) suggest that new technical communicators have "a realistic view of one's position in the team's or organization's hierarchy" (p. 125), while simultaneously attempting to put themselves on a "social trajectory" (p. 127). Intern 2004-01, who worked for an office within a large government agency, recommends that understanding how technical communicators' work fits into the structure of the larger organization can help improve the ability to "appropriately write and frame the information in their communication products" (p. 27), thus enabling the communications to be perceived as more valuable. Obviously, learning this takes time, and many of the interns reported devoting significant percentages of the total time of their internship to training and self-study.

Before accepting a position within an organization, technical communicators need to determine whether their individual values and goals mesh with the organizational culture. For example, intern 1985-01 realized too late that her scientist colleagues in the research organization where she interned did not believe that the work she had been assigned to do added value. They perceived it as busywork and, given the limited

time of her internship period, this attitude was difficult to change, especially without management support. Another intern, 2007-01, discovered that she was the only female in a small organization and did not fit well into the culture. Intern 2004-03 reported struggling with ethical issues relating to the animal research about which she was writing. Situations of poor organizational fit are best avoided at the outset, as they will just make the challenge of proving one's value even more difficult. In contrast, intern 2009-01, a test case technical communicator, displayed a positive attitude by saying that "explaining my role, demonstrating my skills, showing my value to the organization, and learning the technical subject matter, continued to pose challenges to my role and position within the organization, and they are challenges that I think anyone who is carving a new path and changing the traditional roles within an organization is going to face" (p. 10). However, depending on the situation within the organization, these efforts still might not have been successful. Technical communicators need both a positive attitude and the right environment to be able to effectively demonstrate their value.

**Proactive Self-Promotion** Kynell-Hunt (2003) argues that to "extend the creation of power, status, and legitimacy," technical communicators need to "become proactive rather than reactive to the specific requirements or needs of industry" (p. 65). Doing so could be challenging, however, as they often serve in roles that support those in other disciplines, such as engineers or software developers. Intern 2009-01 stated, "I knew that simply sitting and waiting for work to fall into my lap was not going to show my initiative or justify the need for a technical communicator. However, if I could say, 'I noticed that I could help with X, is that something I could get involved in?' I knew that they would see that I was proactively trying to make myself more visible and valuable to the organization" (p. 56). Intern 2004-02 earned respect by taking initiative in creating a newsletter to promote the new web-based learning group of which he was a part (p. 29). Additionally, intern 2007-01 stated, "I was my best advocate" and would "seek out the areas where my expertise would be valuable—especially looking for those that may have been overlooked by management" (p. 45). Furthermore, to make herself more well known, intern 2009-01 tried to find opportunities to work with colleagues nationally and globally because "[g]etting involved in projects beyond the [local] office helps to illustrate that I am adding value to the entire organization in ways that no one at [organization] would have predicted" (pp. 56–57).

Some interns found that an effective way to demonstrate value was to assist colleagues with technical editing. For example, intern 1985-01 struggled to get her research scientist colleagues to appreciate her work. She eventually noticed that she could show value through editing their writing, but she struggled to move beyond that. Another intern had more success with this approach; when intern 2004-02 edited content that had already been edited several times by others, he made significant improvements to it (p. 27), greatly impressing his teammates. Although some technical communicators may resist this tactic, adding value in small, yet tangible, ways may be an effective starting point.

**Financial Awareness** As Mead (1998) puts it, "if technical documentation cannot be shown to contribute to the bottom line, it has no reason for being, regardless of its efficiency or the quality of the documents themselves" (p. 353). Several of the interns specifically mentioned budgetary considerations. Intern 2004-04 was thinking in the right direction when she wanted to "get a better sense of how technical communicators help [the company] meet its primary goal of increasing profitability" (p. 7). Intern 1995-03 ultimately added value to her firm by realizing that with "fixed contract projects" such as the environmental report she was working on, there was no point in trying to persuade the client to accept changes that would make the document more user-centered because this would generate additional work with no additional revenues (p. 24).

While many made some reference to considering billable hours and total revenues, most of the interns did not mention using specific rubrics for measuring value. However, intern 2004-03 mentioned that a goal of her work was "reducing the number of technical assistance and support calls" (p. 12). Additionally, intern 2007-01 indicated a bottom-line focus by mentioning that she learned to always think of her client's financial backers as "the most important audience for the documentation and for the software" because "if the investors pulled their funding … [the client] could potentially collapse

because it was a start-up company that relied on its investors for financial support" (p. 24). While she did not elaborate on the specifics of how she demonstrated value, intern 2009-03 (employed by a division of an international consulting firm) stated that value-creation is one of the organization's core values—"ensuring that our products and services provide measurable value and meet or exceed client expectations" (p. 4).

While none of the interns reported making vast strides towards adding value by effecting change within their organization, some reported small successes. For example, intern 2004-02 convinced his colleagues of his relevance to the work group by displaying his wide array of skills, such as "content management, problem solving, and instructional design" (p. 28). Intern 2007-01 took the initiative to prepare "status reports" for her manager and her client to show the value she was adding and to "foster effective communication" (p. 40). Most happily, intern 2009-01, a test case technical communicator, was offered a full-time position.

Not all interns were as victorious. Intern 2004-03 attempted to change the organization's writing style to what she had been taught in school—always using serial commas and active voice—but was not successful (p. 24). She also tried to provide design suggestions for the report templates, but her "suggestions were sidelined to keep the focus on the prose" (p. 29). Intern 2004-04 was a bit dismayed when her proposal to having a style sheet for naming icons consistently was not accepted, as "sadly only issues that directly affected functionality were immediately or eventually addressed" (p. 23). This intern further explained that her attempts to add value by making documentation more user-centered were hampered when "the SMEs proposed that I write system-centered documentation" and "it was difficult to reach a compromise that we knew users would appreciate" (p. 23). In some cases, these suggestions might not have moved forward because general rules learned in academic environments cannot always be applied within the complicated tangles of constraints present within workplaces.

Despite varying degrees of success, these interns were all attempting to apply similar audience-centered principles. In doing so, they were drawing from a common body of knowledge, which is part of another important aspect of professionalization: a professional consciousness.

## Professional Consciousness

Because most of the interns in my study were new employees without prior work experience, they faced challenges common to any new employee. Sometimes, however, these challenges were compounded by the lack of professional identity in the technical communication field. Savage (1999) observes that some technical communicators "do not see themselves as members of a category of workers who are distinguished by specialized knowledge and practices, nor by a professional history in terms of which they can identify themselves" (p. 161).

Two kinds of issues pertaining to professional consciousness relate to my examination: ambiguity of career paths and an evolving common body of knowledge.

**Ambiguity of Career Paths** Savage (1999) argues that the opportunity to have "a long-term career in the field" (p. 142) is necessary for a professional consciousness: "practitioners should be able to expect to advance in the field, earning increasing rewards and recognition, without having to leave the profession" (p. 142). Indeed, several interns indicated that they were planning this path, although they did not seem to subscribe to a narrow definition of the field. For example, intern 2007-01 described her internship as follows: "I was an editor, a communicator, a printer expert, an MS-Office guru, an application whiz, a programmer, a writer, a trainer, a graphic design specialist, an information architect, and an instructional designer to name a few. To explain how I fill all of these roles each day as a technical communicator would never do the field justice" (p. 49). Intern 2004-01 stated that he learned to educate coworkers "about the breadth of technical communication and all of the ways that [he] could contribute to [the organization] beyond writing and editing documents" (p. 27). He believed this internship was a good step toward his "future endeavors as a technical and environmental communicator" (p. 10). Intern 2004-02 demonstrated a professional identity by stating that a goal for his work was to "model the importance of the technical communication profession" (p. 29).

Some of the internships had designations other than "technical communication." For example, intern 2009-03, who had an instructional design position with a large consulting firm, explains the overlap between the two fields but also notes that "there were some areas where I needed to develop new skills

that I had not learned during my study of technical communication" (p. 56), including writing training genres (such as scenarios and case studies) and using software tools for instructional design software (such as iAuthor and Adobe Presenter). She explains that the instructional design development process she used is similar to the technical communication problem-solving process she learned in the MTSC program. The audience-centered approach also overlaps, as do the writing skills (2009-03, p. 60). As a community health worker, intern 2009-02 performed many technical communication tasks, such as writing grant proposals (p. 29). She indicated that in this position she was able to "function as a technical and scientific communicator in multiple ways: as a knowledge manager, writer, editor, project manager, information designer, trainee, trainer, and subject matter or software expert" (p. 39). Intern 1984-01 mentioned that after his internship in a technical communication department of a large company, he moved into a different department but continued to write documentation while also having increased responsibilities. These examples indicate that in contrast to degree programs such as engineering or accounting, where most graduates do go on to become engineers or accountants, not all graduates of technical communication programs go on to specifically designated technical communication positions. This issue complicates the idea of the professionalization of technical communication because the overlap that the field has with others may hinder it from becoming a distinct and differentiable profession.

**Evolving Common Body of Knowledge** Savage (1999) supports the need for a common body of knowledge for technical communication, saying that "an attitude prevails that our field has no content, no 'higher world of ideas'" (pp. 156–157). The authors of the internship reports, however, draw from a common body of knowledge—that which they received from their technical communication master's degree program.

A few of the interns expressed disappointment that their internships did not allow them to apply all of their skill sets. Intern 1984-01, for example, felt limited in the technical communication department of a large data processing company and moved to a different position within the company that gave him more leadership and decision-making opportunities. At the other end of the time range, intern 2004-03 also felt limited in terms of being able to use her design skills. She felt constrained by being restricted to working with report templates and boilerplate and stated, "I will search for jobs in the future that will let me apply a balance of writing and design techniques to help my communications accomplish their objectives" (p. 29). In contrast, intern 2004-04 was pleased that she could display a variety of skills, saying that "technical communicators are also required to be learning strategists, project managers, and Web site developers" and believed her master's program prepared her accordingly (p. 24).

## Trends in the Professionalization of Technical Communication

Using the same five themes as in the analysis in the previous section, the following reviews what the reports suggest about the progress made toward professional status for technical communication over the last quarter century and how that status may be enhanced.

### Educational background

The trend toward more degree programs in technical communication is a positive step in the direction of professionalization. Only one of the earliest interns in my sample expressed difficulty in working with technical communication colleagues who lacked training in the field.

However, academic programs in technical communication vary in curricular requirements (Harner & Rich, 2005; Meloncon, 2009). For example, some require internships and some do not, in contrast to established professions such as social work, nursing, and education, where internships are required and standardized (Savage & Seible, 2010). The difficulty of standardizing academic programs is an issue that will need to be addressed as technical communication moves toward professional status.

Another issue that has persisted over time regarding education is that because technical communicators typically work in conjunction with colleagues in other fields, they somehow need to develop expertise in those fields. In fact, in this age of distributed work, technical communicators are frequently lone writers working with a variety of colleagues who have different backgrounds.

Because technical communicators are commonly charged with compiling, or "undistributing," this work (Slattery, 2007), they often need expertise in other fields. In my study, this issue was identified by interns across the entire time period. While the MTSC program required some coursework in a specialty area, other programs may not. In standardizing degree programs, this issue of subject-matter expertise will need to be addressed, possibly by requiring that technical communication degrees be accompanied by minors or double majors in the field the individual chooses to enter.

### Identifiability

The issue of technical communicators' colleagues and clients not understanding what they do persists. For example, Hoeniges (2001), one of the interns profiled in Savage and Sullivan's (2001) *Writing a Professional Life: Stories of Technical Communicators On and Off the Job*, said to her employer in her exit interview, "I think that you underappreciate the contribution that your writers could make on your software projects .... Often, my role on the so-called team is to … do some kind of grammar magic …. But [we] can bring so much more. We can help with logical thinking, project management, GUI design … I'm leaving … because I don't want to spend every day frustrated at knowing that I could make a difference …" (pp. 53–54).

The reports across the entire time span of my study reflect this sentiment as well. When people think of technical communication, they often think of writing and editing technical documents. However, technical communicators can, and desire to, do much more. Additionally, as technology has evolved, so has the technical communication skill set. For example, the first intern listed in Table 3, 1984-01, performed what might be thought of as "traditional" technical communication tasks—editing and gathering information to create technical documentation. Also, interns 1984-02 and 1985-01 edited and assisted with writing documents such as brochures and SOPs. At the other end of Table 3, while the interns were still writing documentation and large reports, they were doing a wide variety of other things as well, such as updating websites, creating online demonstrations, designing online training, and doing project management activities, such as developing timelines, status reports, and checkpoints.

One might argue that identifiability is a problem for interns in any field, because it is often unclear what type of work interns should do, given that they have limited experience. In fact, O'Neill (2010), a former director and counselor at a large university's career services office, states that she "met many students who landed in my office precisely because their internships lacked direction and meaningful work" (p. 4). Additionally, Tovey (2001) explains how writing interns she supervised were given childcare duties by the director of a shelter because those assignments were perfectly acceptable for the social work interns the agency also employed. Like Tovey's interns, the interns in my study faced problems that have more to do with their being technical communicators than their being interns.

What makes technical communication different from professions such as social work, law, and accounting is that these fields involve relatively easily defined concepts, in that regardless of the specialty (e.g., children's services, intellectual property, auditing), the social worker, lawyer, or accountant is easily identified. However, "technical communication" is nebulous because technical communicators can work in any profession.

Therefore, perhaps one way of moving toward professionalization is that rather than aiming to professionalize technical communication positions, which are inherently difficult to identify, we should focus on professionalizing the skill set. This way of thinking might add further credence to the Technical Communication Body of Knowledge project (Coppola, 2010), which is an attempt to codify the knowledge that one claiming to have the expertise of a technical communicator should have, regardless of the nature of the technical content to which one applies these skills or the job title one holds.

### Status

The issue of status has long been a complaint among technical communicators, but it is also a common problem with interns. Status issues were evident across the entire range of my study. While some of the status issues the interns experienced may have resulted just from being interns, others resulted from the nature of technical communication. Some mentioned that they had been cautioned throughout their academic career to expect status problems, indicating that this expectation could at least partially be a self-fulfilling prophesy.

Rather than perpetuate this mind-set, technical communication programs should educate students to think of themselves as professionals deserving of status. However, students also need to be equipped with strategies for promoting themselves and selling their skill set. Obtaining technical subject matter knowledge or having a degree in another field may also help increase status. While the movement toward professional certification of technical communicators may be a step in the right direction, certification in itself may not improve status unless employers understand its significance. Like some of the interns in my study, rather than waiting for status to be granted them, technical communicators need to use their rhetorical skills to understand and work with the difference in goals that colleagues and clients may have.

### Demonstrating Value Added

Adding value goes hand in hand with status. Technical communicators need to take the responsibility of proving their worth to others within organizations, being aware that others are often focused on the bottom line. By taking a bottom-line focus, technical communicators should be able to identify strategies for adding value, as many of the interns in my study did.

Part of being able to demonstrate added value depends on having the right organizational fit in the first place. Those interns in my study who struggled with convincing clients and coworkers of their worth were likely not in the right organization. While it may be difficult to do, especially for those with little workplace experience, technical communicators should strive to seek employment in organizations that value communication and have needs matching the technical communication skill set. Additionally, once within an organization, technical communicators should seek opportunities for self-promotion, as several of the interns did.

As with many of the other characteristics of professionalization, the need to demonstrate value added was present across the entire range covered by my study. However, it is common for members of professionalized fields to work on a contract basis as outside consultants inherently responsible for convincing others of the need for their services (e.g., accountants, lawyers, engineers), so the need to prove value added is not unique to technical communication and will likely become even stronger if professionalization is achieved. The difference between technical communication and other professions may be that technical communicators are often not academically trained to think in a profit-oriented way—something that will need to change as the field moves toward professional status.

### Professional Consciousness

The professional consciousness of technical communicators seems to have eroded over time. Of the three most recent interns in my sample (from 2009), two were not employed as technical communicators (one was an instructional designer and the other a community health worker), and the other, although called a technical writer, was in an experimental position in which she largely needed to create her own work. In contrast, the earliest intern (1984-01) was employed preparing documentation in the technical communications department of a large company. In the 1980s, when the MTSC program and many other technical communication programs were established, graduates could expect to find jobs as technical writers, much as graduates of engineering programs expect to find jobs as engineers. However, as time went by, those positions were downsized, outsourced, or merged into other positions. With the advent of the Internet, additional roles in which technical communicators can employ their skills sets have arisen. While the lack of professional consciousness is not necessarily a bad sign, it may be partially remedied through the body of knowledge project and STC's move toward certification. These efforts should help both technical communicators and those they work with develop a clearer understanding of the work they can do and the value they can provide.

## Recommendations Regarding Professionalization

The analysis of these internship reports supports the following recommendations for students, employers, and faculty. Building on Munger's (2006) advice regarding technical communication internships in general, these recommendations should help interns to be perceived as professionals and to improve the professionalization of technical communication as a whole.

### Advice for Interns

- **Before accepting the internship, ask about the tasks you will be assigned and their importance to the organization.** Some of the interns were surprised that the organizational culture did not place much value on their projects or on writing in general (1985-01, 2004-04).
- **Try to choose an internship in which you will be dealing with subject matter with which you are comfortable and conversant.** Some of the interns (1984-01, 1985-01, 1994-01) encountered obstacles by not having a technical background as strong as that of their clients or coworkers (e.g., computer programmers, scientists). Also, most of the interns mentioned the need to be willing to invest significant time in becoming familiar with the subject matter.
- **Before beginning the internship, ensure that you will have a supervisor and/or a mentor who understands the competencies of technical communicators and the value they can add.** If there are no mentors available within the organization, use your professors and other contacts to help you find one outside the organization (2007-01, 2009-02). Also, be sure your mentors and supervisors will be available during your internship period.
- **Be prepared to network within the organization.** Several of the interns built trust through networking. For example, intern 2004-02 took the initiative to participate in various projects to make new contacts and demonstrate his value, and intern 2009-01 found that "Getting involved in projects beyond the [local] office helps to illustrate that I am adding value to the entire organization in ways that no one at [organization] would have predicted" (pp. 56–57).
- **Realize that the subject-matter experts from whom you seek information have their own goals and deadlines; do not take delays or oversights personally, and use your rhetorical skills to show how your work can benefit them.** Be prepared to work with a wide variety of specialists of all levels of experience. Intern 1995-01 explains the need to be able to "work as an equal with doctoral scientists, physicians, and other highly trained and experienced individuals" and to be able to motivate them to provide what is needed (p. 26).
- **Take initiative and apply a wide range of skills**. Many of the interns capitalized on opportunities they would not have been given if they had not sought them out (e.g., 2009-01).
- **Realize that there is often not enough time for the kind of evaluation and feedback from your supervisors that your professors likely provided you in school.** As intern 2007-01 says, "oftentimes no response or feedback was a sign that I was meeting or exceeding [my supervisor's] expectations" and that in some cases "no feedback is *good* feedback." This intern found that the "lack of feedback meant that [her supervisor] was very impressed and relieved he did not have to offer me feedback to produce good, quality work on time" (pp. 43–44).

### Advice for Employers Sponsoring Internships

- **Realize that interns and new employees desire and appreciate feedback—both praise and constructive criticism.** Interns may initially be confused by the "no news is good news" approach described by intern 2007-01. They also may feel uncomfortable asking for feedback, so offering frequent feedback, even if brief, helps interns better align their work with your expectations.
- **Have a clearly defined and present supervisor.** Because the environment is new to interns, be sure supervisors are available throughout the internship period. Some interns became frustrated and confused when their supervisors took extended leaves of absence (1984-01, 2004-03).
- **Have appropriate and relevant work for the intern to do. Ask interns for input.** A number of interns found that their skill set was not being fully used. Before finalizing the internship, explain the work as specifically as possible. If work plans change, develop adequate alternatives. For example, a widespread economic downturn affected the work plans for interns 2009-01 and 2009-03, when clients of the consulting firms they worked for scaled down or canceled projects. Even in-house administrative work can be mutually beneficial; for example, intern 2009-01 worked on improving the firm's résumé book.

- **Provide opportunities for interns to display their professionalism and coach them in doing so.** Allow and encourage interns to interact with clients and other professionals, but also realize they will not yet have built the network needed to know whom to go to with particular questions. Introduce interns to relevant contacts and encourage them to demonstrate and sell their entire skill set.
- **Increase contact with faculty.** Academic programs related to technical communication are always looking for internship opportunities for students. If you have such an opportunity, contact relevant faculty. The STC website includes a database of academic programs (http://stc.org/education/academic-database).

### Advice for Faculty

- **Increase contact with organizations that could benefit from technical communication interns.** Using your school's career services office and your own network, find appropriate contacts within organizations that could potentially employ interns. Ask students to do the same. If a student has a successful internship experience, maintain contact with that employer so that future students can be placed there. If a student has an unsuccessful experience, try to identify the reasons so that changes can be made for future placements.
- **Help students learn to develop social knowledge and authority.** Because a common problem among the interns was the failure to fit into the organization's culture (1985-01, 2004-04, 2007-01), teach students to critically evaluate how well their values and skill sets might mesh within organizations with which they are considering employment. Sullivan, Martin, and Anderson (2003) say, "Not only should our students be learning subject-matter, rhetorical and production skills, they should also be learning social strategies that will enable them to create identities of belonging" (p. 132).
- **Help students understand that principles of style, punctuation, and usage—such as writing in the active voice or using serial commas—are understood and applied differently among organizations.** Some interns expressed frustration that writing guidelines they had learned in school were not followed in the workplace. For example, when intern 2004-03 suggested that the scientific research organization where she was working review its policy of not using the serial comma, she was "informed that this was a long-standing practice that was not going to change" (p. 24).
- **Try to prepare students for the reality of financially related workplace concerns such as managing budgets, tracking billable hours, maximizing revenues and profits, and making accurate estimates.** In school, the financial aspects of projects are often ignored. In the workplace, however, such issues are typically of primary concern. Students should be equipped to handle the financial aspects of project management, particularly as many technical communicators now work for consulting firms. Many of the interns reported needing to be concerned with billable hours, project budgets, and revenues. For example, intern 2009-03 mentioned that while designing training, she had to keep the project budget in mind when deciding which features to include (p. 47). Intern 2007-01 explained that it was undesirable for employees to be in the office or "'on the bench' and not actively billing at a client site" (p. 6). Intern 1994-01 realized "the critical importance of learning how to make accurate work estimates" (p. 40) and how these estimates affect both coworker and client expectations.
- **Encourage students to make meaningful and explicit connections between their internship work and their coursework.** Through internships, students should "learn to integrate theory and practice, classroom learning, and professional experience" (Clark, 2003, p. 475). Because they had completed their coursework and were away from campus, the interns in my study were instructed to make these connections in their reports. Integrating internships with classes where students meet online or in person with the instructor and other interns can allow them to make these connections more immediately and, perhaps, deal with challenges more quickly.

## Conclusion and Future Research

This article has examined the professionalization of technical communication from the perspective of a sample of internship reports of technical communication graduate students. These reports have been used to provide insight into the progress (or lack thereof) toward professionalization of technical communication. I have used these firsthand studies of interns over the recent quarter century to look at professionalization of the field and provide recommendations for students, sponsoring organizations, and faculty to design internship programs that will help contribute to the professionalization of the technical communication field.

This initial investigation indicates that while there have been changes in the nature of technical communicators' work and the environment in which it is conducted (such as changes in technology and the movement toward distributed work), many of the same issues regarding the professionalization of the field have existed throughout the entire range of my study. These results seem to verify what many of us already know: There is still work to be done in terms of making technical communication a viable profession now and in the future.

My hope is that further study of these reports will provide more insights into how we can improve the visibility of the contributions of technical communicators and the value that they provide. This article argues that steps toward enhancing professionalization can be made in the earliest work experiences of a technical communicator's career, by all involved—interns, employers, and faculty.

## Acknowledgments

The author is grateful to the Council for Programs in Technical and Scientific Communication for providing a 2010 research grant in support of this project, to Northern Kentucky University Master of Arts in English graduate student Amy Jones for her assistance with this research, and to her colleagues Andrea Gazzaniga, Tonya Krouse, and Tamara O'Callaghan for their comments on drafts of this article.

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Manuscript received 14 February 2011, revised 14 June 2011, accepted 16 August 2011.

## Appendix A: Internship Reports Included in This Study

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Jackie Damrau, Editor

# Books Reviewed in This Issue

## Create Stunning HTML Email That Just Works!

Mathew Patterson. 2010. Collingwood, Vic, Australia: SitePoint Pty. Ltd. [ISBN 978-0-9805768-6-3. 144 pages, including index. US$29.95 (softcover).]


*Create Stunning HTML Email That Just Works!* should be in the arsenal of all freelance Web designers looking to expand their client lists. It also belongs in the library of anyone working in a field that sends mass messages.

The six-part book starts with a useful discussion of the role of e-mail. Patterson cites statistics that belie the idea that e-mail is an old tool, useless in an era of tweets and apps, and notes that "email is a low-cost, high-return medium that appeals to businesses" (p. 2). Bless him, he urges planning and information reuse.

Here is a statistic that should give you pause if you design your own e-mails: "Building HTML for email means you're dealing with more than four or five major web browsers, and 12 to 15 different email clients, each with solid market share" (p. 70). The guts of the book explain why the `<table>` tag is vital to HTML-coded e-mail despite the advances in coding for Web sites. It should also affirm why a designer's skill and know-how are needed to do the job right.

E-mail samples abound in the "Design for the Inbox" chapter, and examples are liberally included in the "Coding Your Emails" chapter. Patterson offers numerous tables that compare feature support in various clients like Outlook, Thunderbird, and Gmail. For example, Table 4.6 (p. 84) compares HTML font properties support for 11 e-mail clients.

Patterson writes with a light and deft touch that makes this book easy and enjoyable to read. For example, a subhead on page 20 poses the burning question "How can I avoid my email being filtered?" The answer: "Use magic, if possible." His running example is for a company (with a Web site, of course) called Modern Henchmen.

The book has a functional design that works with pages of text as well as the many colorful examples of HTML-based e-mail messages and side-by-side comparisons of e-mails viewed in different programs. Clearly marked notes, tips, and warnings are sprinkled throughout. The book has a dedicated Web site with errata, a code archive, downloadable templates, reader reviews, and ordering information.

Page vi informs us that SitePoint specializes in publishing "fun, practical, and easy-to-understand content for Web professionals." *HTML Email That Works!* is all that and more.

**Ginny Hudak-David**
Ginny Hudak-David is the senior associate director in the Office for University Relations, the communications unit of the three-campus University of Illinois.

## HTML, XHTML & CSS QuickSteps

Guy Hart-Davis. 2010. New York, NY: McGraw-Hill. [ISBN 978-0-07-163317-8. 206 pages, including index. US$19.99 (softcover).]


*HTML, XHTML & CSS QuickSteps* is a great how-to book that takes you through the world of HTML, XHTML, and CSS in very simple, bite-sized, step-by-step chunks. The QuickSteps books use guideposts (icon-based text boxes) on almost every page to give you additional detail about information on that page. This book will teach you everything you need to know about creating your own personal or business Web site. Hart-Davis covers topics on how to structure your Web pages, apply manual formatting, add graphics and links, create tables and frames with HTML, use cascading style sheets (CSS) to control formatting, use Microsoft Office applications (for example, Word, Excel, PowerPoint) for Web page creation, and create forms and scripts to collect information from your Web visitors.

Images (graphics) are an area that many Web creators fail to set up for proper accessibility and use

by screen readers for visitors with visual challenges. Hart-Davis says to tag all Web site images with the alt attribute for decorative, bulleted, or horizontally lined images. This tag shows text to visitors if the image does not display in their browser or instructs screen readers to tell visitors what is being displayed.

Hart-Davis recommends testing every aspect of your site with the three common browsers: Internet Explorer, Firefox, and Safari. The majority of people use Internet Explorer (60-70%), with 20-25% using Firefox and 7-10% using Safari.

It's important to find the right Web host. Hart-Davis suggests you look for eight features in hosting: amount of space, amount of traffic, number of e-mail accounts, your own domain name, Internet connection speed and uptime, Web tools support, audio/video streaming, and shopping carts and secure servers. Web hosting services offer multiple types of services, ranging from basic to developer, at reasonable rates. Many internet service providers have generous service offerings for no charge or for a minimal fee.

*HTML, XHTML & CSS QuickSteps* walks through an in-depth process on how to plan, design, and create your Web site to meet the needs of your audience. As you begin building your site, make sure that you have permission to use any digital content (music, audio/video, photos) to prevent a lawsuit for copyright infringement. Not everything on the Web is available for free use.

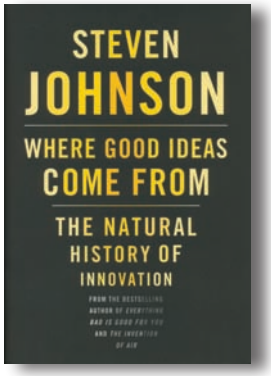
I enjoy especially how Hart-Davis provides common Internet and computer terminology (*site*, *servers*, *clients*, *URLs*) with enough detail not to detract from the step-by-step instruction. Also enjoyable are the historical bits, such as how the Web should have been called the Mesh because many sites are nothing more than a "mesh of links among pages" (p. 28). The book's layout, simplicity in style, and use of the iconic guideposts make it an easy read.

**Jackie Damrau**

Jackie Damrau has more than 20 years of technical communication experience. She is a Fellow and member of the STC Puget Sound chapter and the Instructional Design & Learning SIG, and General Manager of the STC International Summit Awards. She serves as the Book Review Editor for *Technical Communication.*

## Where Good Ideas Come From: The Natural History of Innovation

Steven Johnson. 2010. New York, NY: Riverhead Books. [ISBN 978-1-59448-771-2. 336 pages, including index. US$26.95.]




A writing assignment that is part of my annual performance review includes a section on innovation. The instructions mention that people in the global company I work for are expected to "think differently to innovate or develop improved alternatives for existing products, methods and approaches." So I turned to Steven Johnson's *Where Good Ideas Come From: The Natural History of Innovation*.

Johnson is the co-founder of three influential Web sites (most recently, outside.in) and author of seven books about science, technology, and culture. *Where Good Ideas Come From* is the closing volume in an unofficial trilogy that began with *The Ghost Map* (Riverhead Books, 2006) and *The Invention of Air* (Riverhead Books, 2008), books about world-changing ideas and the environments that made them possible.

To answer the question "Where do good ideas come from?" Johnson took an environmental perspective, looking for the spaces that have historically led to unusually high rates of creativity and innovation. He states the argument of the book: "A series of shared properties and patterns recur again and again in unusually fertile environments" (p. 17). He then divides them into seven patterns (the adjacent possible, liquid networks, the slow hunch, serendipity, error, exaptation, and platforms), devoting a chapter to each.

Johnson builds his argument around anecdotes drawn from different historical periods and contexts. Examples are mostly from natural sciences and high tech. A key takeaway from the book is "the more we embrace these patterns—in our private work habits and hobbies, in our office environments, in the design of new software tools—the better we will be at tapping our extraordinary capacity for innovative thinking" (p. 17).

The book ends with an analysis that takes roughly 200 of the most important innovations and scientific breakthroughs from the past 600 years and then plots each breakthrough somewhere in one of the four quadrants of a diagram.

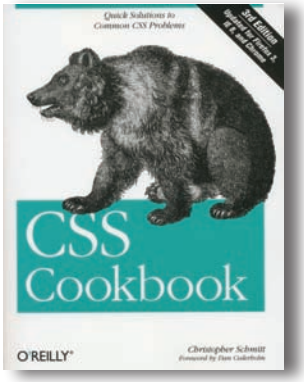
This may not seem like a book to recommend to technical communicators, but there are plenty of inspiring examples from today's leading innovative companies that easily make the book worth reading. One of the best examples is Google's "20-percent time" program for all engineers. It lets them spend 20% of their time on whatever pet projects they want. The program has played a part in generating key products such as AdSense (in 2009, responsible for more than $5 billion of Google's earnings), Orkut (one of the largest social network sites in India and Brazil), and Gmail. Also fascinating are the remarks on Apple, which is consistently ranked as the most innovative company in the world.

For a book that approaches innovation from the more traditional perspective of group action and the individual, I recommend *The Innovator's Way: Essential Practices for Successful Innovation* (The MIT Press, 2010), by Peter J. Denning and Robert Dunham.

**David Kowalsky**
David Kowalsky is a technical writer for NEC Corporation of America. He received his MA in East Asian studies from Washington University (St. Louis) and a certificate of technical writing and editing from the University of Washington. He is a senior member of STC's Puget Sound Chapter.

## CSS Cookbook, 3rd edition

Christopher Schmitt. 2010. Sebastopol, CA: O'Reilly Media. [ISBN 978-0-596-15593-3. 704 pages, including index. US$49.99 (soft cover).]




This is the third iteration of this reference on coding with cascading style sheets (CSS). Browsers have evolved since the first published edition in 2004, and Schmitt's compendium has attempted to incorporate these changes. As with almost all technology books, however, the technology—browser support for specific features—changes faster than the time it takes to write, edit, publish, and sell a book. As a result, some browser limitations noted in the print version may no longer apply by the time a coder uses the *CSS Cookbook*. There is an online edition, but it is only free of charge for 45 days after entering the coupon code from the print version.

*CSS Cookbook* is not intended to be read cover to cover. Instead, readers can look up the "recipe" for the particular task they want to accomplish. Even though the current CSS 2.1 standard offers many more options than 1.0 did, the "Hacks and Workarounds" section is still one of the most useful portions of the book. Other helpful information includes notes on accessibility (did you know that right-justified text is difficult to read for dyslexics?) and an appendix listing all CSS properties, their values and defaults.

Each "recipe" outlines the problem this particular item is intended to solve, the solution itself (including sample code), a discussion of how that solution works, known browser issues with this item, and a "see also" section referring to further information elsewhere on the Web. Many "recipes" also include screen shots and other graphic elements. While many "before and after" shots help readers visualize how exactly this particular solution changes the display of text or graphics, some add little to the text. A few screen shots are downright confusing, as when a caption purports to show the effect of a selector on an ordered list, but the corresponding image shows an unordered list.

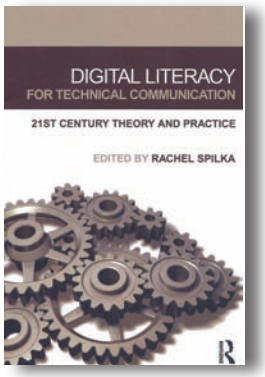
Somewhat perplexing also is the inclusion of a chapter on HTML basics. According to the preface, *CSS Cookbook* assumes the reader "possess[es] some web design or development experience" (p. xviii). Presumably, anyone with such experience would not require an explanation of how to code a basic HTML page. While leaving that chapter and some of the less helpful illustrations out would not have slimmed the volume down to the 240 or so pages of its first edition, it might have made the book somewhat easier to handle (not to mention saving some paper).

All in all, however, *CSS Cookbook* still is a useful and comprehensive reference for web coders of all stripes.

**Barbara Jungwirth**
After writing software documentation and managing an IT department, Barbara Jungwirth now translates technical documents from German to English and codes for an HIV Web site. She owns reliable translations llc (www.reliable-translations.com) and writes a blog, On Language and Translation (http://reliable-translations.blogspot.com/).

## Digital Literacy for Technical Communication: 21st Century Theory and Practice

Rachel Spilka, ed. 2010. New York, NY: Routledge. [ISBN 978-0-8058-5274-5. 272 pages including index. US$39.95 (softcover).]




*Digital Literacy for Technical Communication*, edited by Rachel Spilka, is a very comprehensive look at the shape of our field and how we influence, and are influenced by, the technology that we work with on a daily basis. The table of contents reads like a "who's who" list of notable scholars such as Saul Carliner, Bernadette Longo, Barry Thatcher, and Michael Salvo, to name a few, who have contributing chapters in this collection. When I began reading this book, my expectations were quite high, and the content and the writing really deliver. It has been years since I have felt this inspired by a collection.

The purpose of *Digital Literacy for Technical Communication* is "to help current and future technical communicators better understand how the nature of their work—and their potential contributions to industry—has changed dramatically in the new digital environment of modern work" (p. xi). The theme of the collection is how much we have evolved as a field because of the rapid changes that are continually taking place in technology. What it means to be "digitally literate" changes as technology changes. We will become obsolete if we don't constantly adapt to new technologies and the new ways information is planned, disseminated, critiqued, and used. Despite that central theme, the attitude toward technology is neither critical nor enthusiastic. Instead, the various authors challenge us to reconsider how we think about technology.

The text is divided into three parts: Part 1 addresses "Transformations in Our Work"; this section attempts to define the field of technical communication and the direction it is moving, as well as explain how technology has fundamentally changed what we do on the job. I was not in the field yet at the time of the Internet revolution, and as a result I found Part 1 fascinating reading and very informative.

The second section, "New Foundational Knowledge in our Field," contains chapters by Dave Clark, Michael J. Salvo and Paula Rosinski, and William Hart-Davidson. The goal of these three chapters, according to Spilka, is to present three new areas that should form the core knowledge of our field: the rhetoric of technology, information design, and content management. A snapshot of last year's Society for Technical Communication Summit presentations backs up this claim that these three areas are of great interest in the field today.

Finally, Part 3 addresses "New Directions in Cultural, Cross-Cultural, Audience, and Ethical Perspectives" with chapters by Bernadette Longo, Barry Thatcher, Ann M. Blakeslee, and Steven B. Katz and Vicki W. Rhodes. These four chapters ask us to question the current theories prevalent in the field and to consider them from a fresh perspective. Each chapter in this

collection was notable to me for a variety of reasons, but the chapters by Longo and Thatcher, in particular, stood out as they challenged us to consider that technology is not culture neutral and to question the ways in which we use technology to spread our culture in ways that might not be palatable for others.

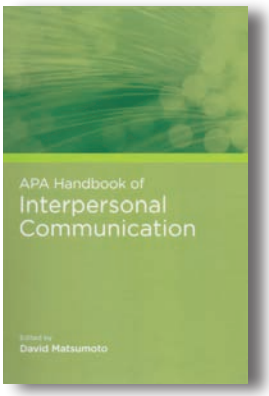
Despite the focus on theory, the tone of *Digital Literacy* is not high-handed. The information is very accessible for all audiences that Spilka mentions in the preface: "practitioners, students, and educators" (p. xi). As a result of the clear and approachable level of discourse, many practitioners would find value in this book, as it most directly concerns them and their workplaces. However, the theoretical nature of the collection and some of its contents would probably not appeal to some. I hope that is not the case, however, because many of the chapters, particularly Carliner's reflections on how technical communication has evolved and Thatcher's chapter concerning digital literacy across cultures would be especially interesting and/or useful to practitioners.

This collection would also be useful for a graduate course in the history of technical communication or the rhetoric of technology. Academics who try to keep a finger on the pulse of industry trends would find this book invaluable because its contents help illustrate how pedagogy should evolve to reflect what is needed in the workplace. Quite honestly, I was so excited by many of the concepts in *Digital Literacy* that I immediately e-mailed one of the authors with questions as well as shared the book with a colleague. I know it will have a valued place in my collection for years to come.

**Nicole St. Germaine-McDaniel**
Nicole St. Germaine-McDaniel is a senior member of STC and head of the Technical and Business Writing Program at Angelo State University, as well as a freelance writer and consultant. Her research interests include technical communication for a Mexican-American audience and technical communication in the health fields.

## APA Handbook of Interpersonal Communication

David Matsumoto, ed. 2010.Washington, D.C.: American Psychological Association. [ISBN 978-1-4338-0780-0. 327 pages, including index. US$79.95.]




*The APA Handbook of Interpersonal Communication,* edited by David Matsumoto, presents 13 studies neatly divided into two sections: theory and application. As I reviewed my notes for this book, I noticed x's and squiggles denoting my lukewarm reception for each chapter dedicated to theory and bold checks and stars denoting my satisfaction with each chapter covering application. Clearly my biases are poorly concealed. As I am only somewhat conversant with linguistic theory, much of the first section was lost on me. As I am deeply involved in the everyday practice and observation of interpersonal communications, both in the workplace and in my personal space, I found the second section to be extremely relevant.

The topics of theoretical perspectives covered in the first section are intriguing—body language, spatial semiotics, politeness, humor and irony, and praising and blaming. I cannot doubt the validity of the arguments presented here as each chapter is well researched with historical literature and recent empirical data, yet to apply them is difficult to figure out. Many of these studies are simply too short to provide tangible insights. For instance, the chapter on "technically-mediated interpersonal communication" (misspelled as "technically-medicated" in the table of contents) provides approximately one page each of information on topics such as blogs, social networking sites, and virtual worlds. One page is enough to introduce a topic, yet too brief to provide actionable information. For a student of linguistics or clinical psychology, this section is likely to prove academically fascinating; for the average technical communicator, mildly curious.

The six-chapter section on applied interpersonal communication is compelling and filled with pragmatic topics such as everyday communication, the language of the elderly, and media competence (a nice companion piece to the earlier chapter on technically-mediated communications). Although several of the pieces focus on specific communication events and situations, such as a chapter on therapy, counseling, and diagnostics, the insights afforded are relevant across a number of scenarios.

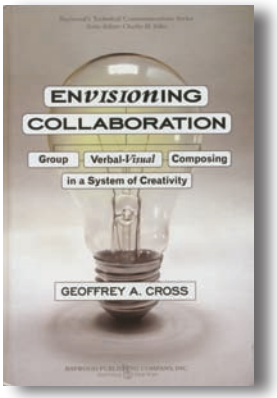
Two of the more memorable chapters are "Youth, Discourse, and Interpersonal Management" by Jannis Androutsopoulos and Alexandra Georgakopoulou and "Nonverbal Communicative Competence" by Nancy M. Puccinelli. In the chapter on youth, the authors offer insight into language tactics that youth use to align, converge, and collude. My favorite is a delightfully academic description of the use of expressions such as "like,…you know,…right?, innit?,…really" (p. 239). With equal adeptness, the writers also cover how youth mark boundaries, manage conflict, and practice exclusion through language. Workplace communicators or leaders should read Puccinelli's chapter on nonverbal communications. Revelations such as "employees skilled at eavesdropping on positive emotions were evaluated more positively by supervisors and peers" (p. 282) are plentiful and make for furious underlining and margin writing.

An average technical communicator may find the price for *The APA Handbook of Interpersonal Communication* prohibitive. APA members or psychology students with an interest in communications may find this book is certainly a fair deal at its reduced member price.

**Gary Hernandez**
Gary Hernandez is a communications manager for BP. He received his English literature MA from George Mason University and received his technical writing MS from Utah State University. Gary belongs to STC and IABC.

## En*vision*ing Collaboration: Group Verbal-*Visual* Composing in a System of Creativity

Geoffrey A. Cross. 2011.Amityville, NY: Baywood Publishing Company. [ISBN 978-0-89503-400-7. 252 pages, including index. US$54.95.]




"You're only as good as your last ad," Geoffrey Cross relates in the opening chapter of *En*vision*ing Collaboration: Group Verbal-*Visual *Composing in a System of Creativity* (p. 23). This quote, from the chief creative officer at an advertising agency, underscores the difficulty and importance of creating excellent work that integrates visual and verbal elements. With its focus on advertising writer-artist teams, this book fills an important gap in research on visual-verbal composing. Frequently, studies focus on either visual *or* verbal collaboration; however, this study examines the overlap between the two.

Cross spent considerable time—more than six years, including three months of participant observation—working with several teams at this advertising agency to learn how they created "effective persuasive and informative verbal-visual messages for client/manufacturer, retailer, and consumer" (p. 25). The thick description afforded by this ethnographic research allows him to make strong claims regarding visual-verbal collaboration. In some cases, these claims extend prior research on collaboration; in most cases, Cross refines or refutes claims made in that prior research.

Along the way, readers sit in on early meetings between writers and artists who are competing to create a winning ad campaign to pitch to their client, a well-known lawnmower company. The writer-artist pairs, or dyads, seek to create a campaign that could translate from standard media campaigns to point-of-sale (POS) ads. The chapters that introduce the two primary dyads make for a fascinating read. Cross interweaves his description of the collaborative process with follow-up interviews, giving the reader a chance to understand the writers' and artists' thought processes.

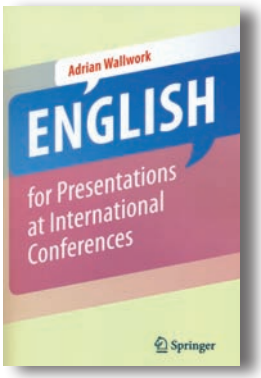
A key challenge for these teams is one that most writers and artists face: complex audiences for their visual-verbal messages. The work these teams produce must appeal to a number of audiences: colleagues at their agency, supervisors, the client, and customers of the client's company. A related challenge is the company-wide "tip-ball" meeting model, which serves as a gatekeeping meeting that narrows the company's focus to one or two pitches. The "tip-ball" meeting should theoretically offer the opportunity for collaboration among all the creatives; however, Cross notes that the tip-ball often leads to team competition, a common collaboration problem.

*En*vision*ing Collaboration* is primarily valuable for researchers studying collaboration and verbal-visual composing in technical communication. Instructors and practitioners interested in developing different modes of collaboration will also appreciate the insights that Cross draws. Besides his theoretical claims, Cross offers several practical recommendations. For example, he presents an assignment cycle that could be adapted for different courses, one that builds on the brainstorming and collaborative techniques used by the study's participants.

**Ashley Patriarca**
Ashley Patriarca is a doctoral candidate in Rhetoric and Writing at Virginia Tech. She earned her master's in English (technical and professional writing) at the University of North Carolina at Charlotte, where she also worked in the Department of Enrollment Management as a technical writer.

## English for Presentations at International Conferences

Adrian Wallwork. 2010. New York, NY: Springer. [ISBN 978-1-4419-6590-5. 180 pages, including index. US$29.95 (softcover).]




This slim book is aimed at presenters with English as their second language (ESL), and specifically at scientific researchers—an unfortunate choice, as this book has far broader appeal. It provides a great introduction for anyone who must learn the art of presentations and a refresher for experienced presenters. Designed as a reference book, it leads you through the steps in preparing a presentation and helps you quickly find topics using the table of contents, which also cleverly serves as a checklist. Although Wallwork makes an early claim to ignore the issues of designing and creating visual aspects of the slides, he provides ample information on integrating visuals with written and spoken text. Though the rules are simplistic, and you will break many of them as your skills grow, they are an excellent guide for beginning speakers and will not detract from a professional's presentations.

A refreshing change is the book's focus on audience. Wallwork explains the characteristics that determine how audiences listen and understand. He reminds us that too many speakers spend more time designing their slides than practicing their presentation and the value of conducting informal colleague reviews before giving the formal conference presentation. Wallwork clearly distinguishes between papers and the presentations based on them, and explains how to identify and clarify the key messages before we start creating the slides. He offers the intriguing insight that crafting a 2-minute "elevator speech" ensures that you focus on the real messages.

*English for Presentations at International Conferences* is full of useful tips, including a section on overcoming nervousness. It includes copious examples, like "before and after" comparisons that help make the principles

concrete. Much of Wallwork's advice applies equally well to writing, and doubly so if you are communicating with an ESL audience. Yet the heart of this book lies in its many presentation-specific gems, such as speaking in your own voice. For ESL presenters, Wallwork mentions online resources such as annotated BBC news transcripts that display the words and let you hear how they are pronounced. For anyone, the collection of speeches at TED.com reveals the tricks of the world's best presenters.

Starting presentations with bulleted lists of your key concepts helps the audience learn your pronunciation as you describe what they are seeing on the screen. Although Wallwork discourages the use of "builds" (adding one bullet at a time to the screen), he correctly notes this technique's superiority to filling a slide with text in a single step: It primes the audience to understand what you are about to say and accommodates the fact that most ESL audiences are better at reading than listening to English. I have found this technique remarkably effective in my own presentations to diverse audiences.

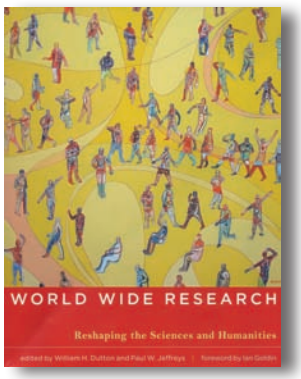
*English for Presentations at International Conferences* is not without problems, such as Wallwork's mixed message about humor. Though he notes that visuals can "inject humor" (p. 83), he subsequently advocates caution (p. 101). Unfortunately, few people are natural comics, and the risk of cultural gaffes is particularly high with international audiences. In my experience, only mild self-deprecation successfully spans cultures, and no presenter should attempt humor without a profound understanding of their audience. The book's index is inadequate, as it is more a concordance, exacerbated by the decision to repeat the index with page and section numbers, instead of creating a larger and more usable index. The writing is generally clear, yet several typos and other proofreading lapses slipped through (for example, the list of editing services on "p. 164" actually appears on p. 166), and words or phrasing may sometimes be difficult for ESL audiences to parse ("adverbs of concession", p. 134; "emotive adjectives", p. 139). Wallwork's suggestion that Chinese authors often get *l* and *r* reversed (p. 29) is rare, though it is common for Japanese authors. And the suggestion (p. 73) that automatic spellcheckers may incorrectly and automatically change words is incorrect; he was undoubtedly thinking of Microsoft Word's AutoCorrect feature.

These quibbles notwithstanding, I can unreservedly recommend this book for ESL presenters, English presenters with ESL audiences, and anyone who needs to learn or polish their presentation skills. The best thing I can say about *English for Presentations at International Conferences* is that it kindled my desire to try many of these tricks in my presentations.

**Geoff Hart**
Geoff Hart has given dozens of presentations and workshops to STC chapters, as well as to audiences in India and China.

## World Wide Research: Reshaping the Sciences and Humanities

William H. Dutton and Paul W. Jeffreys, eds. 2010. Cambridge, MA: The MIT Press. [ISBN 978-0-2625-1373-9. 382 pages, including index. US$33.00 (softcover).]




James Gleick, in his new book *The Information*, views information technology evolving in three parts: the historical (drums, smoke signals, etc.), Shannon's 1949 information theory, and the flood (post-Shannon). In addition, changes in electronic storage (Moore's Law) means massive increases in available research data leading to the flood with its accompanying access problems. Those issues are what Dutton and Jeffreys' anthology addresses, specifically, finding and accessing relevant data by researchers.

The editors have divided the papers into four major groupings: The Foundations, State of the Practice, Social Shaping of Infrastructures and Practices, and Implications for Research. The collection ends with an essay from the editors, The Ends and Means of World

Wide Research. All papers are from the James Martin 21st Century School, University of Oxford.

The problem, as described by Dutton and Jeffreys, is that a deluge of research data exists in the sciences and humanities that requires attention to designing access for use by cross-disciplinary researchers. It does not matter if the researcher is a single individual or a research consortium scattered across several disciplines and located worldwide. They all face the mounting deluge of data and problems associated with it.

The editors call using such data "e-research" and insist that the problems will generate waves well beyond the laboratory or the ivory tower. The result is a change in what e-researchers know and how they know it.

The editors write:

> *Our edited collection focuses on how e-research is reshaping and will continue to reshape not only how research is done but, more important, its outcomes. . . . Our aim is to create an understanding of this process in a way that enables researchers and an array of other relevant actors to generate a "virtuous cycle." (p. 3)*

That cycle is the standard way to do research: collect data, analyze and organize them, write papers or presentations, and upload them as data to the system.

Of interest to technical communicators is the usability in e-research section with essays by de la Flor, Jirotka, Lloyd, and Warr; Martin; and Thelwall. Usability, say de la Flor et al., is no longer about software interfaces. Rather, it is "a means through which support can be given to the requirements of cooperative work arrangements" (p. 135). They discuss three areas in which usability becomes important: Requirements Engineering, Human-Computer Interaction, and Computer-Supported Cooperative Work. Martin's essay looks at computer platform security, speculating how trusted computer technologies might work, and Thelwell addresses social networking and its e-research role.

For the price, this collection is a bargain. It offers insights into how researchers manage the flood of data/information, emphasizes the importance of understanding how e-research teams cooperate, and notes the ways they communicate and collaborate. And it should prove useful for not only technical communicators, but also managers and e-researchers.

**Tom Warren**

Tom Warren is an STC Fellow, Jay R. Gould Award for Excellence recipient, and professor emeritus of English (technical writing) at Oklahoma State University, where he established the BA, MA, and PhD technical writing programs. Past president of INTECOM, he serves as guest professor at the University of Paderborn, Germany.

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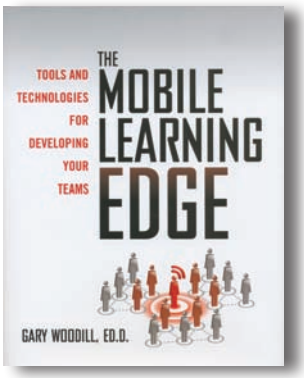
## The Mobile Learning Edge: Tools and Technologies for Developing your Teams

Gary Woodill. 2011. New York, NY: McGraw-Hill Companies, Inc. [ISBN 978-0-07-173676-3. 269 pages, including index. US$29.95.]




Although it seems we are entering the age of mobile devices, mobile technology began to emerge as early as September 11, 2001. Many people that day were using their BlackBerry devices to communicate via text messaging during the attack on the World Trade Center. People used mobile communication in 2005 when Hurricane Katrina hit New Orleans. Now, text messaging is commonplace. Yet, the use of mobile devices for learning is still in its infancy.

In *The Mobile Learning Edge*, Woodill provides an overview to mobile learning, addresses the need for companies to develop a future-oriented mobile learning strategy, and includes a case study in most chapters. I found the Intuition.com case study involving Merrill Lynch among the best.

Merrill Lynch, one of the world's leading wealth management companies, found its employees struggling to find time for training. They conducted a pilot study by providing their employees with three compliance training courses over a two-month period. Merrill Lynch conducted the pilot training because of the need

for security on BlackBerry devices. They branded the training delivery medium as "GoLearn—a new way to take your training with you" (p. 22). This pilot study was so successful that companies now want to develop similar mobile training for their employees.

Managers will find Woodill's book exceptionally helpful, as it not only guides the reader through the evolution and methods of effective mobile learning and how to gather information with mobile devices, but also spotlights contributing writer David Fell's work on the management of mobile learning. In Chapter 8, Fell addresses the guidelines for developing a future-oriented mobile learning strategy, a key topic of this book. He quotes from Pip Coburn's book, *The Change Function*: "…new technologies are adopted only when the present crisis in your business is more painful than the 'total perceived pain of adoption' of the proposed new technology" (p. 170).

It is important to plan for the present and the future. Fell addresses such mobile learning business models as just-in-time learning, contextual learning, information storage and delivery, and the creation of field-based learning materials. He stresses the importance of understanding the strategic context and competitive environment into which mobile learning will evolve.

Herle closes the book in Chapter 10 by addressing how to implement and manage the enterprise mobile learning offering. She suggests developing a vision of your organization's overall mobile culture. In addition, Herle poses such questions as who gets mobile devices? how do you control employee data on devices? and how do you control personal use of the device?

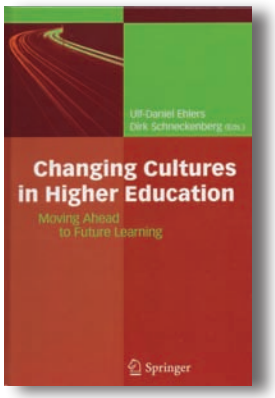
This book is a nice reference for managers and technical communicators who want to know more about mobile learning. In fact, you can begin your own mobile learning by purchasing Woodill's book from Amazon's Kindle Store and reading it as you are on the go.

**Rhonda Lunemann**

Rhonda Lunemann is a senior technical writer with Siemens PLM Software, a senior member of STC's Twin Cities Chapter, and a member of the Hill Speakers Toastmasters Club (Club 4415).

## Changing Cultures in Higher Education: Moving Ahead to Future Learning

Ulf-Daniel Ehlers and Dirk Schneckenberg, eds. 2010. Heidelberg: Springer. [ISBN 978-3-642-03582-1. 533 pages, including index. US$179.00.]




If you are concerned with the unrealized potential of technology to increase the abilities of universities to prepare students for work in the twenty-first century, Ehlers and Schneckenberg's *Changing Cultures in Higher Education: Moving Ahead to Future Learning* may be of interest.

This book focuses on the implementation and implications of new technologies for university education with ongoing cultural changes and rapidly evolving information and communication technologies. The cultural changes include changes in student demographics; the faculty's role in collaborative, cross-disciplinary, user-center, participatory learning that develops problem-solving competencies; the need for institutional administration to lead and support innovation; and greater dependence on universities by the government and civil society to contribute toward solutions that benefit the society and support economic prosperity. The editors provide 37 articles from an international array of scholars and practitioners who address the topics of strategic change management, competency development, and quality assurance.

The section about strategies to support change focuses on the needs for a holistic combination of top-down management and bottom-up faculty activities that support the development and implementation of technology-enhanced education, identification and reduction of important organizational barriers to change, increased participatory decision making, and an environment that facilitates incorporating technology that supports collaborative learning.

The section about developing competencies of faculty and students to use technologies for teaching, learning, and research focuses on the conceptual

framework and methods for developing the competencies required to effectively execute e-learning. Schneckenberg contends that many universities have neither fully recognized nor exploited the potential of e-learning because of organization barriers and faculty failure to recognize the e-learning potential and to develop the requisite competencies to effectively use e-learning. He concludes that universities should take the lead in training their faculties.

The section about quality assurance of e-learning in universities focuses on the need for comprehensive strategic plans for the implementation and assessment of both e-learning programs and outcomes. The authors argue that such plans should focus more on pedagogy and organization, and less on the technological component. These plans should be derived from established quality assurance strategies that are already in place for strategic management of universities' business models, revenue, and collaborative initiatives.

This book is forward-looking and thought provoking, yet has some shortcomings such as the two-and-a-quarter page index that is inadequate for a textbook of more than 500 pages. The content, and its organization, would benefit from adding a chapter to each of the three sections that identifies and concisely explains the principles essential to each section. The editors' emphasis on Web 2.0 technology is odd, since this technology will be replaced by whatever follows, which will be replaced by something else.

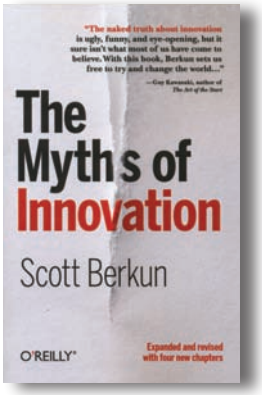
*Changing Cultures in Higher Education* can be a useful resource for those who are interested in strategies and case studies about the use of technology to increase the readiness of our universities to prepare students for work.

**Wayne L. Schmadeka**

Wayne L. Schmadeka serves on the faculty in the Professional Writing Program, University of Houston-Downtown. He founded and for 12 years ran an educational software development firm, has extensive experience developing varied documentation, and consults with engineering firms to increase the effectiveness and reduce the cost of their documentation.

## The Myths of Innovation

Scott Berkun. 2010. Sebastopol, CA: O'Reilly. [ISBN-978-1-449-38962-8]. 228 pages, including index. US$17.99 (softcover).]




Despite the importance assigned to innovation, most of us know little about how innovation takes place in the real world. Worse, Scott Berkun argues in *The Myths of Innovation*, much of what we think we know is clouded by myths or misconceptions that interfere with our ability to actually understand and bring about worthwhile change.

In this expanded paperback reissue of the 2007 hardback, Berkun adds to the work that has already established him as one of the thought leaders in the field. Before becoming an author and consultant, Berkun spent a decade (1994–2003) in the trenches as a manager at Microsoft, where he worked on the early editions of Internet Explorer. Berkun is also the author of *Making Things Happen*, and *Confessions of a Public Speaker*.

In *Myths* Berkun examines what he calls the ten most "pervasive and misleading" myths about innovation. He discusses the belief that innovation can be achieved by some method, and the role and importance of epiphanies and bright ideas (including the belief that good ideas are hard to find); he also covers the figure of the lone inventor, the idea that the boss knows more about innovation than you do, that people like new ideas, that innovation is inherently good, that the best ideas win, and more.

Throughout, Berkun uses well-researched historical and contemporary examples to expose what is misleading, and then point to better models for success. Take the story of Newton and the apple; even if it were true (it's not), it obscures the hard work that went into deriving the laws of motion, Newton's real achievement. Stories like the Newton story feed our misconceptions about the role of epiphany in innovation—the pervasive belief that innovation starts with a bright idea. Yes, epiphanies happen, Berkun says, but they usually come

at the end of a long process of hard work on a problem, like finally seeing the picture when the last piece of a jigsaw puzzle is placed, not at the beginning. Would-be innovators, he says, would be better off searching for good problems to work on than on waiting for bright ideas to strike.

While Berkun works to debunk myths, it is clear throughout that his purpose is to arm you with the wisdom you will need to improve your own chances of success. To this end, *The Myths of Innovation* has been considerably expanded for the paperback edition and now includes chapters on "How to pitch an idea," "Creative thinking hacks," and "How to stay motivated."

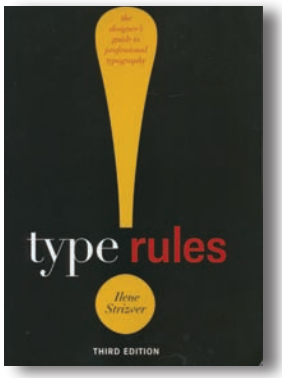
The book also contains an extensive appendix on research and recommendations, which contains both an annotated bibliography and a ranked bibliography in which Berkun orders his sources according to how useful they were to him while writing the book. Even those who have the hardcover may want to look at the paperback edition for its new material.

**Patrick Lufkin**

Patrick Lufkin is an STC Associate Fellow with experience in computer documentation, newsletter production, and public relations. He reads widely in science, history, and current affairs, as well as on writing and editing. He chairs the Gordon Scholarship in technical communication and co-chairs the Northern California technical communication competition.

## Type Rules!: The Designer's Guide to Professional Typography

Ilene Strizver. (2010). 3rd ed. Hoboken, NJ: John Wiley and Sons, Inc. [ISBN 978-0-470-54251-4. 272 pages, including index. US$55.00 (softcover).]




*Type Rules!: The Designer's Guide to Professional Typography* is in its third edition, revised for current standards and practices. A new chapter on nonprint typography has been added to cover type on the Web and type in motion. Technical tips (TECHTIPS in the book) have been updated for recent versions of Adobe InDesign and QuarkXPress, while type tips (TYPETIPS) carry helpful hints and interesting tidbits about typefaces. Each chapter offers one or more exercises designed to reinforce concepts learned in that chapter, especially if you are using this book in an introductory graphic design course. In later chapters, the exercises provide potential portfolio pieces, such as a spa brochure exercise.

While Strizver stresses in the introduction that the book does not need to be read in order, someone with little to no experience in typography will benefit from reading the chapters in sequence. The first three chapters cover a brief history of type, an introduction to font technology, and what makes a typeface look the way it does. This information provides a good grounding for all the succeeding chapters.

Strizver then leads you through selecting the right type for the job, formatting type, type emphasis techniques, and fine-tuning your type. These chapters go into the details of type, including type size, line length, indents, tracking, and kerning.

The section on finessing your type describes some of the options available if you're using OpenType fonts, including small caps, figures, swash characters, and alternate characters. To round out the topic, Strizver also covers drop caps, raised caps, and the many types of initial types and techniques.

The book finishes by identifying and showing how to avoid common typographical typos; how to use typographical elements such as symbols, signs, fractions, and accents; and how to design your own typeface. A three-page glossary with the terms used throughout the book is included, along with a bibliography, the digital font foundries and distributors mentioned, and a list of typographic resource links.

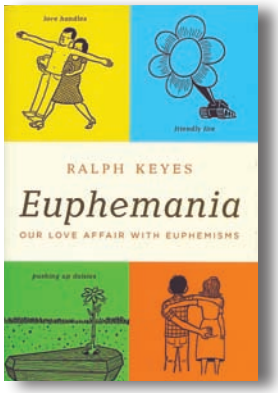
I like how the book's examples include not just art pieces, but also real-world products and layouts. The examples illustrate the concepts in each chapter without being inaccessible. The use of color to make some examples pop from the page is a refreshing treat for the eye.

*Type Rules!: The Designer's Guide to Professional Typography* is a comprehensive introduction to the principles and practices of typography. This third edition is a reference I'm happy to have on my bookshelf.

**Rachel Houghton**
Rachel Houghton is a Senior Information Designer at Sage, a leading-edge construction productivity and real estate solutions company. She has more than 14 years of technical communication experience. Rachel is the STC Secretary and is actively involved in the STC Willamette Valley community. She enjoys photography and Photoshop.

## Euphemania: Our Love Affair with Euphemisms

Ralph Keyes. 2010. New York, NY: Little, Brown and Company. [ISBN 978 0-316-05656-4. 279 pages, including index. US$24.99.]




Ralph Keyes has written an excellent book about euphemisms that will teach you not only their history but also why we use them. Do *not* read this book in a library, because you are bound to laugh out loud. And while it is written in a popular style, Keyes' erudition shows through in every page and is supported by a fine bibliography that can take you deeper into the subject.

Euphemisms come from dis-ease, or as the author defines them: "words or phrases substituted for ones that make us uneasy" (pp. 7–8). And what makes us uneasy? Topics such as sex, the body, secretions and excretions, illness and death, unfamiliar food, money, and war. Euphemisms allay that discomfort, or as Keyes puts it: "Euphemisms represent a flight to comfort, a way to reduce tension when conversing. They are comfort words" (p. 6).

What did I learn from reading this book? That "sleeping with" someone is not anything new—it was well known to the ancient Greeks and Romans—and is perhaps the most venerable euphemism of all. Are you annoyed with people who say "passed away" instead of died? That goes back to the Middle Ages. Did you know that "bear" is a euphemism for "the brown one"? That Johnson—the most often used last name for penis—goes back to the British lexicographer Samuel Johnson, subject of one of the most famous biographies ever written? And that riffed (Reduction In Force) is a terrible euphemism for laid off?

One of the helpful insights of this book, though perhaps not an original one, is that *class* has a great deal to do with euphemisms. The middle class has always thought it could separate itself from the lower class and move into the upper class by eschewing vulgar words.

The lower classes, meanwhile, reveled in them and the upper class had nothing to lose by using them.

The chapters on sex, farting, bowel movements, and body parts will have you in stitches, while those on money (one of the most taboo of topics) and war may get your blood boiling. It's amazing how the Civil War and World War I changed the way we speak.

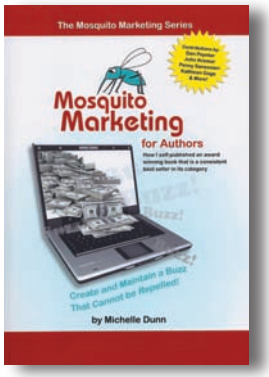
Why do we euphemize? "The primary social value of euphemisms is that they make it possible to discuss touchy subjects while pretending we're talking about something else" (p. 229). Plus it's fun and creative and provides a code to keep people in or out.

Whatever the case, this is an enjoyable, well-written book for those wishing to have a more profound understanding of the role of euphemism in language.

**Charles R. Crawley**
Charles R. Crawley is a Lead Technical Writer at Rockwell Collins, Inc., in Cedar Rapids, Iowa. He was riffed once and would like to see the Cubs in the World Series before he passes away.

## Mosquito Marketing for Authors

Michelle Dunn. 2010. Plymouth, NH: Never Dunn Publishing LLC. [ISBN 978-1-4536-0530-1. 174 pages. US$23.95 (softcover).]




*Mosquito Marketing for Authors* will start you thinking about marketing your book without relying on a publisher. So will most other marketing books for authors, but Dunn includes many examples from her own experience, such as a timeline of speeches she gave and her experience at the Book Expo of America. If you are looking for a jumping point, Dunn's book includes important concepts, if not always actual information. The final chapter includes a list of books, magazines, and Web sites with more information about marketing books.

However, the concepts are the same ones that people already know, yet they aren't expanded with important "how-to" information. The promising title "Promote your website for under $50" merely says to look at Google Ads. Another promising title, "Word of mouth advertising," vaguely says it is a good thing, but offers no advice on how to get it started, other than "it really does work . . . but you have to work at it" (p. 145). Knowing that word-of-mouth advertising is free and really works doesn't help me without some pointers on how to get it started.

Where useful information exists, such as examples, the organization makes it difficult to reference specific information. Various pieces of related information are scattered throughout the chapters. For example, the chapter "Marketing off line" includes selling your books over the Web. Many sections do not outright relate to the chapter, leaving the reader to decipher the connection. For example, Dunn describes name recognition in the chapter "What is my niche?" She writes that "selling yourself means getting as much name recognition as you can or becoming popular in your genre" (p. 59). Dunn does not say how her methods of name recognition, which I assume reference sections such as "Donations" and "Promotional items," relate to your niche.

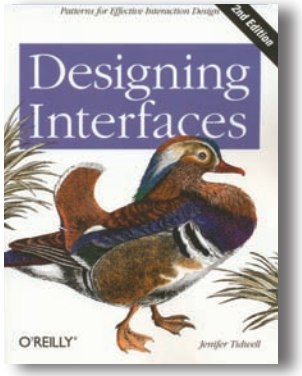
Besides the disordered and lacking information, the writing is poor. Errors include linking independent sentences with comma after comma and switching "to" and "too." But the writing style has greater problems. One of the first sentences Dunn offers: "One very important point I have to make right away in this first chapter is that if you are an author and your book is published, no matter who publishes your book it is up to you" (p. 14). Regardless, the best information was in sections written colloquially with personal examples. Yet many sections never fleshed out the idea.

Finally, the cover states that she "self-published an award winning book that is a consistent best seller in its category." I am not sure how other writers feel about using word trickery in marketing, but *Mosquito Marketing* discusses that the best-seller may be the only book in its category. Dunn also includes advice about publishers, yet this book is self-published. In the end, this book doesn't offer anything better than would a different, well-written marketing book.

**Angela Boyle**
Angela Boyle is a technical writer for Tyler Technologies, Inc, where she has worked since April 2006. She graduated from the University of Washington with a BS in technical communication.

## Designing Interfaces

Jennifer Tidwell. 2011. 2nd edition. Sebastopol, CA: O'Reilly. [ISBN 978-1-449-37970-4. 550 pages, including index. US$49.99 (softcover).]




*Designing Interfaces* is a well-annotated interface design pattern library. It's an excellent read for interaction design students and entry-level user experience designers to get a full spectrum of the popular user interface patterns. It also works well as a shelf reference book for experienced designers when it comes to design brainstorming and problem solving.

The book starts by laying out the theoretical framework by introducing the online user behaviors such as "safe exploration," "instant gratification," "deferred choices," user expectations and how they may interact with software/Web site, and design implications for making the interface more intuitive and user friendly. Chapters 2 through 10 provide a complete overview of the user interface (UI) patterns for navigation, layout, commands, information graphics, forms and controls, social media, and mobile. Tidwell gives two to five pages to each pattern where she discusses and illustrates the information in sections titled "What," "Use when," "Why," "How," and "Examples." The book's layout and information is well designed and presented.

The first edition of this book was released 5 years ago, and Tidwell has added two new chapters in this edition: one on social media that discusses tactics and patterns for integrating social media into a site or application, and another about mobile device design, which is a heated topic at conferences and in publications.

The last chapter, "Making it Look Good: Visual Style and Aesthetics," is an enjoyable read. Starting with the manifesto "Looking good matters" and quoting Donald Norman's well-known book *Emotional Design*, this chapter touches on the basics of visual design (color, typography, spaciousness and crowding, angles and curves, texture and rhythm) and what it means for desktop applications. Tidwell talks in-depth about the patterns and examples, drawing from the basic visual design theory like deep background; few hues, many values; corner treatment; borders that echo fonts; hairlines; contrasting font weights; and skins and themes.

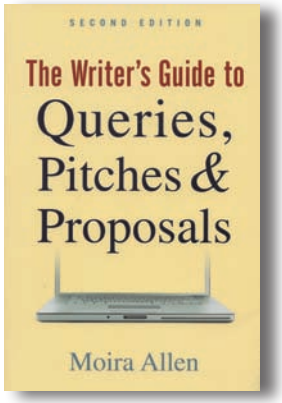
*Designing Interfaces* comes in two versions: paperback and a slightly cheaper Kindle version. The 576-page paperback is designed nicely with quality paper and color print; the Kindle version is visually less appealing, yet offers less weight with hyperlink navigation for references between chapters.

Overall, I find this book to be a comprehensive collection of best practices and reusable UI design patterns. The title might be a bit misleading; this book might not be your ideal choice if you are looking for interface design fundamentals, case studies, or design lessons learned. *Designing Interfaces* is more descriptive rather than analytical. It is not about describing a problem and guiding you through the analytics and reasoning to create a holistic user experience design. It's the readers' job to apply the patterns to the real-world problem solving.

**Kejun Xu**
Kejun Xu is a User Experience Designer in Santa Barbara, CA. She wears multiple hats (interaction designer, information architect, user researcher) and designs across platforms (desktop, mobile, iPhone/iPad). She is extremely passionate about bringing her customers a more usable, useful, and enjoyable user experience.

## The Writer's Guide to Queries, Pitches & Proposals

Moira Allen 2010. New York, NY: Allworth Press. [ISBN 978-1-58115-743-7. 290 pages, including index. US$19.95.]




The second edition of *The Writer's Guide to Queries, Pitches & Proposals* leaves technical writers like us who want to write a book, newspaper column, play, or other work for publication with no excuse for not proceeding. This book is a prospector's map to a gold mine of information, examples, and surprising facts about resources and methodology to use in accomplishing the task of hitting pay dirt in the publication world. One interesting nugget is that you can leverage your work experience into a pitch for freelance work with a trade publication in the same industry.

In the introduction, Allen states that much of what is new is how to use the proliferation of online avenues for reaching editors, checking posted guidelines, and actually submitting queries. Those who have a similar yet outdated reference book already on their shelves will have a good reason to purchase this one. Spare yourself time and frustration by circumventing the long wait, wondering if the intended editor has received your communication. Unfortunately, you must remain patient for a time while the editor reviews your submission.

Ah! Which to send? A pitch, query, or proposal? If you don't know the answer now, you will after reading the chapters on "The Perfect Pitch," "Writing the (Almost) Perfect Query," "Preparing a Nonfiction Book Proposal," and "A Novel Proposal." Submission guidelines available from each publisher will indicate whether the shorter pitch and query or longer proposal is in order. Other chapters of interest include "Why Not Self Publish," "Speaking and Teaching Opportunities," "Pitching to the Greeting Card Market," "Grants for Writers," "When to Give Up," and "Capitalizing on Success." Another nugget worth discovering is the inclusion of dozens and more real samples of publisher contacts that resulted in successful publication. You can study successful maps instead of guessing and perhaps missing the mark.

Being the possessor of an extensive list of rejection notices and author of a self-published book, I am preparing to don my prospector's helmet once more and search for an actual publisher. From personal experience, I suggest that anyone like-minded have the following in place: a timely idea or passion about publishing a written work, a plan with several options for marketing the work, a list of potential purchasers (audience) and appropriate publishers, and Allen's book. Remember, the cost of this book is tax deductible if you make a sale.

Hoping we strike it rich . . . or at least find success as each defines it.

**Donna Ford**
Donna Ford is a senior member of the STC. She has been a technical writer since 1987 in the hardware, software, and government health care industries.

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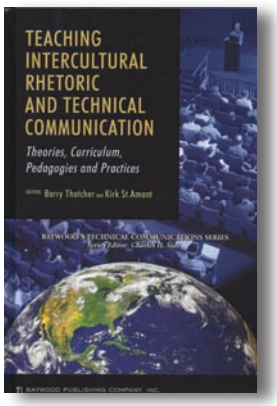
## Teaching Intercultural Rhetoric and Technical Communication

Barry Thatcher and Kirk St.Amant, eds. 2011. Amityville, NY: Baywood. [ISBN 978-0-89503-377-2. 288 pages, including index. US$58.95.]




"The trend toward off shoring means that much previously indigenous work is now produced in parts of Asia and eastern Europe" (p. 19). Because so much high-technology work is done worldwide, technical communicators must be aware of cultural differences, especially since many products now have a global audience.

I was expecting this collection of academic writing to focus on how to teach intercultural

communications, specifically in the technical writing classroom, because *Teaching Intercultural Rhetoric and Technical Communication* contains a "Teaching Approaches" section with chapters on teaching intercultural communications and visual rhetoric. Yet this section focuses on ways to integrate and not "ghettoize" interculturalism in the general classroom, with scant attention paid to the specific issues for technical communicators. However, there are some interesting criticisms of teaching practices that focus on grammar instead of other areas of writing instruction. For example, given the rise in global world English, non-native audiences will understand and maybe even prefer what some native speakers might consider incorrect grammar or usage like "I am hearing a noise" (p. 77). Another section contains chapters on course development that could be useful for instructors in other fields. For example, you could apply the information on study-abroad programs to nearly any course.

The book does address technical communications in the field surveys in a particular country or in a case study. For example, the chapters on technical writing in India, Israel, and New Zealand are interesting. Various authors discuss how technical communication instruction is seriously lacking in many parts of the world. France is reassessing its state-approved curriculum, looking at including writing instruction at the university level. India has a postgraduate program, but according to two surveys (done in 2005 and 2007) most technical communicators have no formal instruction or training in the field. Another chapter presents a case study of international trainers in Japan. The author's advice, which runs counter to the typical audience analysis that focuses solely on the reader, is that "we must learn just as much or more about ourselves as about our audiences. We cannot assume a shared frame of reference; our language, our versions of history, our views of time, and our assumptions about professional relationship may all be different" (p. 132). He then explains some cultural exchanges that prove his point.

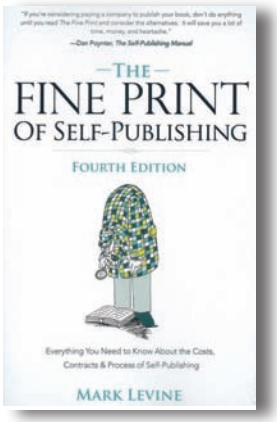
The examples and content are interesting and thought-provoking, the book is generally well written and organized with a strong index, and many in higher education—specifically rhetoric and composition—will find the materials here useful. However, I was disappointed. As a technical communications teacher, I was hoping for answers to common problems, suggested course content, or current technical communication practices. The chapter on teaching International Organization of Standardization (ISO), for example, would be useful in any of the sciences or engineering fields. But if you're looking for material directly addressing technical communicators, this probably isn't the book.

**Kelly A. Harrison**

Kelly A. Harrison, MFA, works as a consultant, speaker, and writing instructor in San José, CA. For more than 20 years, she has written technical materials and online content for various software companies. Currently, she teaches writing at San José State University and prefers short-term and part-time contracts.

## The Fine Art of Self-Publishing: Everything You Need to Know About the Costs, Contracts, & Process of Self-Publishing

Mark Levine. (2010). 4th ed. Minneapolis, MN: Bascom Hill. [ISBN 978-1-05098-55-3. 274 pages, including index. US$16.95 (softcover).]




Getting a book published today is not like it was once. It's common knowledge that traditional book publishing is shrinking, and that e-books and self-publishing (SP) are increasing. Less known are the challenges, and pitfalls that await the self-publishing author. Mark Levine does a fine job guiding new authors through the mist.

Technical communicators need to understand the problems that SP authors face as we may be providing them editing support. The first part of *The Fine Art of Self-Publishing* deals with the many facets of e-books and self-publishing. Major topics include marketing, publishers' contracts, and notes on book design.

Levine approaches marketing from several viewpoints: the author, the publisher, and online booksellers. Traditionally, publishers traditionally marketed their own books, but today traditional publishers as well as SP houses often ask new, unknown authors to cover most of the marketing costs themselves. Marketing your own work involves a completely new marketing strategy where the author must blog, get on specialized Web sites, conduct media interviews, and publicize their book in diverse ways. The SP company's job is to work with online booksellers like Amazon.com and Barnes & Noble to list the book. Amazon.com is crucial for authors, since traditional houses often use their sales rankings to decide when to offer the author a contract. About six million books appear on Amazon, so that even a ranking of 100,000th is not bad.

Levine emphasizes the magnitude of the shift to SP and e-book publishing: In 2008, for the first time, more SP titles appeared than hard copy. On Christmas day 2009, Amazon sold more Kindle e-books than off-the-shelf titles.

*The Fine Art of Self-Publishing* highlights two important yet problematic elements for SP publishers: cover design and margins, which incur costs and affects profit. For cover design, Levine stresses that covers sell books: "A bad cover will kill your book" (p. 15). Authors can make covers from templates or custom designed them, normally using Adobe InDesign or Photoshop, yet it's worth spending more for a good cover. Margins are important to the overall design of the book and crucial to its sales. The margins for a 100-page book should be different from a 400-page book, to accommodate the gutter. "While the public might not notice that [the publisher] extended the margins to lower the page count and save on printing, the buyers for retailers and wholesalers will know the second they crack open your book" (p. 16).

Contracts for an SP author can be very detailed. Contract elements include printing markup, return of original production files, exclusive *versus* nonexclusive licensing, and royalties. In chapters 8 through 12, Levine discusses the individual SP houses, ranging from Outstanding and OK to the Worst of the Worst. Though you may not be an SP author, or not yet one, it really helps if you know your potential audience.

**Steven Darian**
Steven Darian is an STC Fellow, having retired from teaching business and technical writing at Rutgers for 25 years and in eight countries. He was a manager for Raytheon in Saudi Arabia. Steven is co-authoring a forthcoming book, *IMPACT: Writing for Business & the Professions,* with Professor Olga Ilchenko.

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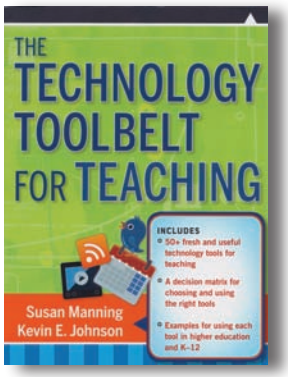
## The Technology Toolbelt for Teaching

Susan Manning and Kevin E. Johnson. 2011. San Francisco, CA: Jossey-Bass. [ISBN 978-0-740-63424-0. 208 pages, including index. US$40.00 (softcover).]




"Teaching is not easy, and teaching with technology is a little like trying to hit a moving target" (p. vii). If this excerpt from the authors' dedication resonates with you, then you may find this book of interest.

*The Technology Toolbelt for Teaching* briefly reviews rationales and processes underlying several instructional design models. The review serves as a cautionary note about selecting Web-based teaching tools: do not buy a hammer to peel an apple. To help ensure that the tools satisfy the instructional need, instructional planning, including identification of the educational needs, should precede tool selection. Manning and Johnson provide a decision matrix for teachers to use in evaluating and summarizing how well various tools satisfy the identified needs. They apply this matrix by evaluating a few tools to demonstrate how instructors can use it. As the authors observe, "requiring students to use too many tools within one class can become overwhelming and frustrating, and can distract students from meeting instructional goals" (p. 22). Too much of a good thing is not a good thing.

Eighty percent of the book is devoted to identifying and describing an array of tools, which include screenshots of tool interfaces and examples of tool uses in elementary, secondary, and higher education. Manning and Johnson categorize the tools by the

functions they serve: organization, communication and collaboration, content presentation, assessment, and "identity transformation," with a multichapter section devoted to each function. Chapters compare a small number of competing Web-based tools by posing and answering questions such as: What is the tool? What problem does it solve? Is it something that instructors or students use? Is the tool for novice, intermediate, or expert users? What special equipment or software is needed? What are some cautions about the tool? How accessible is the tool to all users? What additional vocabulary is needed?

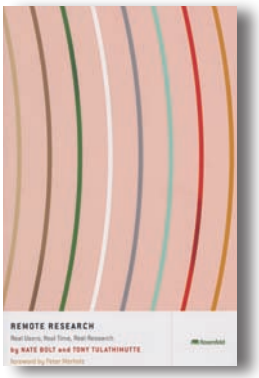
The organization section includes chapters about calendars, scheduling, graphic organizers, social bookmarking, and file management. The communication and collaboration section covers discussion forums, Voice over Internet Protocol, instant messaging and chat, blogs, wikis, microblogs, and Web conferencing. The content presentation section compares audio, video, screencasting, narrated slideshows, and image tools. The assessment section addresses quizzes, tests, surveys, rubrics, matrixes, and e-portfolios. The identity transformation section covers avatars, virtual worlds, social networking, and emerging technologies.

Manning and Johnson explicitly state that the product list they selected for evaluation is not comprehensive because of the abundance and typically short life cycles of Web-based tools. They picked products that represent a category and may have some expectation of longevity. The primary value of *The Technology Toolbelt for Teaching* lies in the categories it identifies as areas of interest to instructors and in the methodology for evaluating tools. This book can be a useful resource for educators who want to use Web-based tools to help improve the achievement of educational outcomes.

**Wayne L. Schmadeka**

## Remote Research: Real Users, Real Time, Real Research

Nate Bolt and Tony Tulathimutte. (2010). Brooklyn, NY: Rosenfeld Media. [ISBN 978-1-933820-77-4. 266 pages, including index. US$39.00 (softcover).]




In the foreword to *Remote Research*, Peter Merholz of Adaptive Path says, "lab usability engineering was born of a simpler time. . . . These days, our customers' technological world is much more complex. . . . Although the world has changed, the methods of standard usability practice are essentially the same as were practiced in the early 1990s. . . . When everything about the observation environment is so unnatural, how can we expect our findings to provide legitimate insights?" (pp. xiii–xiv).

Bolt and Tulathimutte's book guides you on a journey to the new methods of usability research. Usability practitioners are now moving from the traditional lab settings to testing in people's homes, offices, and other environments as well as conducting usability testing from their desks with their observers in other rooms or in other parts of the world.

The authors compare market research, which looks for opinions, with user experience research, which is more behavioral. In the first chapter, Bolt and Tulathimutte introduce the concept of time-aware research. Time-aware research makes it possible to capture the participant in the middle of performing a task of interest on the Web site, enabled by live recruiting.

Chapters 2 through 5 provide details on setting up, recruiting for, and conducting a basic remote "moderated" study. In these chapters, you learn the details about the equipment needs, the process for conducting a pilot test, designing recruiting screeners, and drafting research documents. It also includes a comparison table on screen sharing tools like GoToMeeting and Adobe Connect. The chapter on remote research uses cases studies to describe automated

forms of research (remote card sorting, task elicitation, surveys) an example of which is a comparison of the Club Med and Beaches.com Web sites. Chapter 8 is a guide to the tools and services that are available for conducting remote research. Interestingly, I found a few automated tools missing from the list, like iPerception and WebIQ (which I have used many times).

Of great interest were the discussions of mobile device research and what they term "reverse screen sharing." At work, we use reverse screen sharing often, as we test many prototypes long before the software upgrades have been developed and integrated into our program.

*Remote Research* presents the challenges of remote testing with the authors discussing the issues of not being able to see the participants' faces through the challenges of online recruiting. A highlight in chapter 10 is the troubleshooting table that outlines problems and solutions for technological issues that might occur during the testing process.

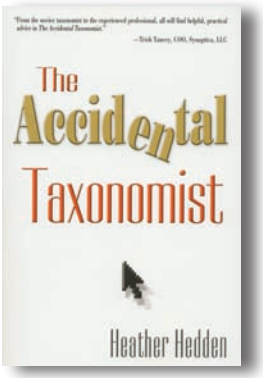
Overall, I found this book to be an excellent addition to my library of usability books and references. The case studies, tables, figures, and chapter summaries effectively support the text. If you are new to usability testing or to conducting tests remotely, this book is a fairly complete guide. I highly recommend it.

**Elisa Miller**

Elisa Miller, an STC Associate Fellow, is a Senior User Experience Engineer for GE Healthcare. She is a past president of the Lone Star Community and is an active member of the STC Usability & User Experience SIG.

## The Accidental Taxonomist

Heather Hedden. 2010. Medford, NJ: Information Today, Inc. [ISBN 978-1-57387-397-0. 442 pages, including index. US$39.50 (softcover).]




Heather Hedden, a taxonomist and web indexer, has written an in-depth guide to the professional world of taxonomy, aiming to educate the person who perhaps has been required to work in the field without having intentionally decided to move in that direction—hence the title *The Accidental Taxonomist*. Nonetheless, this work can be fruitfully used to guide the already practicing taxonomist as well, as is evident from the wealth of information it contains. Its most salient features, however, reflect Hedden's assumption that the reader will have had no previous experience in the field and will need a full and comprehensive introduction.

Copiously illustrated with screenshots, tables, and other figures, the work is especially detailed and clearly written. Hedden gives us 12 chapters that define the field ("What Are Taxonomies?"); introduce its practitioners, their duties, and training ("Who Are Taxonomists?"); explain and define terms and their relationships ("Creating Terms," "Creating Relationships"); investigate software ("Software for Taxonomy Creation and Management"); differentiate human versus automated indexing ("Taxonomies for Human Indexing," "Taxonomies for Automated Indexing"); elucidate structure ("Taxonomy Structures"); present the display of thesauri and hierarchical taxonomies ("Taxonomy Displays"); introduce the steps in planning and implementing taxonomies ("Taxonomy Planning, Design, and Creation," "Taxonomy Implementation and Evolution"); and review taxonomy as a profession ("Taxonomy Work and the Profession"). In addition, four appendixes (Survey of Taxonomists, Glossary, Recommended Reading, and Websites) supplement the main text. A biography of the author and a serviceable index round out the volume. Hedden also supplies an online version of the links mentioned

in the book, which she expects to update as online addresses change or disappear.

In a work of this length, it should not be surprising that the information contained goes down to a fine level of detail. For those who have less knowledge of the field, it can serve not only as an in-depth introduction to familiarize new practitioners with the basics but also as a desk reference for those who need the occasional refresher or as a reference work to check best practice or the meaning of a term. For that reason, the glossary and index become especially important as reader aids in locating partially remembered information. These are generally well executed, but would have been even better had Hedden included a few more abbreviations as entries in the glossary. For example, "related term" is an entry in the glossary, but the reader who looks for "RT" will not find it. In the index, "RT" is listed in parentheses ("related term (RT)"), which it could have been its listing in the glossary, too. On the other hand, "OWL" is an entry in the glossary, but "Web Ontology Language" is not.

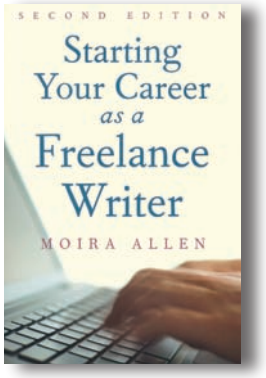
These are very minor complaints about a useful and usable volume, one that fills a gap in addressing a field that becomes more important as the world's data explosion challenges us to access information that is increasingly difficult to tame.

**Karen Lane**

Karen Lane is a freelance technical editor, indexer, and coauthor of a technical communication textbook, *Technical Communication: Strategies for College and the Workplace.* She is an STC Fellow and has served on several Society-level committees, as well as serving as program manager for the 2008 STC Technical Summit.

## Starting Your Career as a Freelance Writer

Moira Allen. 2011. New York City, NY: Allworth Press. [ISBN 978-1-58115-760-4. 317 pages, including index. US$24.95 (softcover).]




So you want to be a writer and you think you have what it takes. But you're not sure. *Starting Your Career as a Freelance Writer* tells you everything you need to know to launch your freelance career.

According to Moira Allen, being a successful freelancer takes writing ability, business sense, professionalism, motivation, perseverance, and discipline. In this 300-plus page book, Allen details the steps to writing an article and locating the right market, explains the query and submission process, and walks you through a contract and your rights as an author. Other sections give you more information on growing your writing career and "commercial" freelancing. The final chapter urges you to take the plunge into the brave new world of freelancing.

Allen has guest contributors pen the chapters on writing for businesses, social networking, writing for newspapers and making cold calls. All the writers include numerous examples. Each chapter (a total of 39) is fairly short with lots of sections. You can read from start to finish or hop around based on your interests or the current state of your career. The information is up to date; the text covers online outlets and resources, e-mail communications, and Facebook and Twitter.

Allen has a friendly conversation style that makes her work easy to read. In chapter 14, for example, she writes about special-interest publications that are "always hungry for new writers" (p. 97). Ah, but you say you aren't an expert? Fear not. According to Allen, being an enthusiast about fly fishing or quilting helps you ask the right questions, means you know the vocabulary of your specialty, and provides you with a keen interest in the topic. The chapter details the types of articles you could consider writing (think personal profiles, current controversies, or how-to), and whether you should specialize as a writer or be a generalist. She covers all this

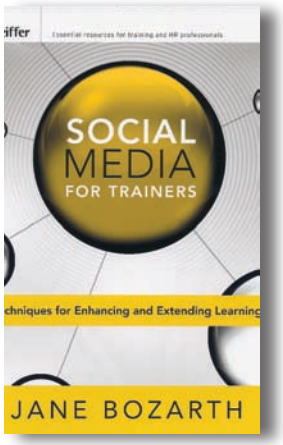
in five pages, yet the brevity doesn't leave you feeling that information is missing.

*Starting Your Career as a Freelance Writer* is well organized, nicely written, interesting, and succinct. A successful freelance author (and editor) herself, Allen is professional, polished, and positive in her book. She gives you hope that you too can be a successful freelance writer.

**Ginny Hudak-David**

## Social Media for Trainers: Techniques for Enhancing and Extending Learning

Jane Bozarth. 2010. San Francisco, CA: John Wiley and Sons. [ISBN: 978-0-470-63106-5. 175 pages. US$40.00 (softcover).]




I can't say that I've ever been so mixed in my reaction to one book as I am with *Social Media for Trainers*. The book covers the popular forms of social media such as Facebook, Twitter, blogs, and wikis. Bozarth begins the book by clearly explaining how social media tools can enhance and reinforce learning. She also emphasizes that technology needs to fit with learning objectives, and that we should not use technology for its sake of simply existing or being popular. Another positive aspect is that each chapter begins with the basics and then moves into a list of possible uses of the tool for training purposes. This is an excellent setup because it does not assume readers are already tweeting, on Facebook, or blogging. If someone is new to these technologies, the book provides simple guidelines for setting up an account to finding topics or people to going mobile. Screenshots and additional sites for information provide extra guidance, which new users cannot underestimate.

I did find a few things that didn't set so well with me. The first is that Bozarth makes a good case that since people are already using the most popular social media tools, trainers should take advantage of that popularity and transfer training courses to those tools instead of setting them up on a separate learning management system. One less place to have to log in would probably be welcome to most employees. However, I doubt that employers would want the bulk of their employee training residing on Facebook and allowing open access at work to that site. Bozarth reiterates at the end of the book that trainers should push for this open access, but I could definitely see an employer's concern over this.

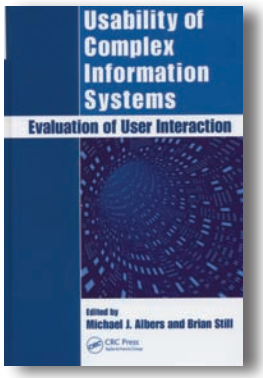
The other thing that disturbed me was the constant referral to filling in the spaces between "formal learning events" as a way to reinforce learning objectives. I have no doubt that the activities that are included in this book will do just that. Yet, I kept asking myself several questions: Doesn't this kind of activity keep people "on" constantly? How much of this "filling in" is mandatory? When do I have time away from work and training? It made me tired just reading about how much would be expected of me outside of work if my training department were to expect me to tweet, respond to Facebook discussions, blog, and then collaborate on a wiki, all while I'm not at work.

It appears as if Bozarth does not want to necessarily tackle these issues, but rather simply help trainers "choose the tool or tools you need" (p. 17). These issues really should be part of a training discussion when it comes to moving material onto platforms outside of work sites, especially if the intention is to fill in the space between formal learning events.

**Diane Martinez**
Diane Martinez is a writing specialist for Kaplan University's online Writing Center and a PhD student at Utah State University. Her technical writing experience has been mostly in higher education, engineering, and government contracting. She has been with Kaplan since 2004 and a member of STC since 2005.

## Usability of Complex Information Systems: Evaluation of User Interaction

Michael J. Albers and Brian Still, eds. (2011). Boca Raton, FL: CRC Press. [ISBN 978-1-4398-2894-6. 372 pages, including index. US$79.95.]




In the opening paper of *Usability of Complex Information Systems: Evaluation of User Interaction*, Michael Albers notes that usability testing for complex information systems requires new and "fundamentally different" concepts and techniques than ordinary usability testing. The research collection brought together by editors Albers and Still unites theorists, researchers and practitioners to answer the question: What are those new and different concepts and techniques?

One overarching theme of the book is the art of defining and conceptualizing the nature of "complexity." Different contributors treat the notion in unique ways. Albers himself, with two papers in the book, sees complexity in the interaction of context and multiple related pieces of information. Vladimir Stantchev sees complexity in work environments and domains such as health care or project management. Kain et al. note the complexity and additional urgency of risk communication. Golightly et al. define complexity in terms of "technical" and "contextual" complexity, showing an interaction between the two.

The notion of "context" is a constant theme: how does the context of an interaction shape the behavior and the design? Shearer applies activity theory to operationalize context, while several authors in different papers point out the need for contextual analysis and field studies in understanding complex systems. Other techniques are needed when the context cannot be fully known, as shown in Watson's paper on application program interface (API) usability or in Barnum and Palmer's paper on the use of product reaction cards to gauge desirability.

The book includes four sections. The first set of papers work to define complexity in the context of information systems and usability. The second set provides a theoretical framework for analyzing complex systems. The third set looks at how the design requirements of complex systems can be shaped and defined. The fourth and final set looks at the practical side of the problem, using case studies to demonstrate usability testing methods applicable in complex systems.

No book can include every possible perspective on a topic, and a few are missing here. Domains rich in complexity such as distributed computing, cloud computing or computer-supported co-operative work are only lightly touched upon.

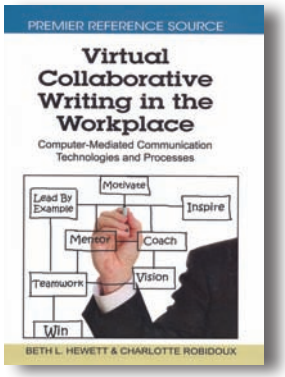
*Usability of Complex Information Systems: Evaluation of User Interaction* builds on the call from thought leaders like Arnie Lund and Janice Redish to re-consider usability evaluation. Instead of techniques for evaluating individual tasks, the papers in this book look at the broader context and user goals in each domain. Taken as a whole, the papers in this book suggest a strong new direction for research in the user-centered design field. They highlight the importance of framing discussions of usability in an overall system, with all the complexity and potential framing that discussion entails.

**Colin Birge**

Colin Birge is a fifth-year doctoral candidate in the Department of Human-Centered Design & Engineering at the University of Washington. His dissertation is on how UX designers approach design problems involving privacy and security issues. He is an experienced program manager and a consultant on privacy and trust.

# Virtual Collaborative Writing in the Workplace: Computer-Mediated Communication Technologies and Processes

Beth L. Hewett and Charlotte Robidoux. 2010. Hershey, PA: Information Sciences Reference. [ISBN 978-1-60566-994-6. 479 pages, including index. US$180.00.]




Collaborative writing, sometimes across multiple continents, is becoming a fact of a technical communicator's life. This substantial book not only describes principles, practices, and examples of successful virtual collaborative writing, but also is itself an example of what a dedicated team of geographically dispersed writers with both industry and academic backgrounds, connected through digital technology, can accomplish using virtual collaboration.

The first section overviews the literature of collaborative writing and highlights the move from traditional collaborative writing efforts into the virtual arena. The book's core revolves around six principles for virtual collaborative writing. Each of the main sections deals with one of these principles, starting with a case study, followed by two or more chapters elaborating on that principle. The table of contents provides chapter summaries, making it easier for readers to hone in on a particular area of interest. Sections describe creating a culture of collaboration while building a virtual writing team; managing team dynamics, including developing leaders and establishing trust; planning and making decisions virtually; developing content virtually and using tools and collaborative modes effectively, including measuring and tracking performance; creating structure as a way of supporting content quality and consistency; and using new media in virtual collaborative writing. In short, virtual collaboration is more than cooperation; it is, in fact, interdependence.

In creating this book, harmonizing the theoretical perspective of the academic authors and the practical concerns of the workplace practitioners was challenging. Some of the writing does tend to be academic, but for the most part the text is well balanced and readable. *Virtual Collaborative Writing in the Workplace* works well as a course text or a practitioners' guide. The case studies in particular leaven this content with stories of real-world collaboration experiences. Most chapters end with practical suggestions that can serve as a springboard for those who are considering or are in the midst of a virtual collaborative writing project. The book has an excellent glossary of virtual collaborative writing terms, an extensive bibliography, and a comprehensive index that makes accessing information easy in this rather large book.

The last chapter summarizes the experiences of the authors in collaborating virtually to create this book. Anyone managing such a project might find this the most useful chapter in the book, as it includes comments by the writers about what worked and didn't work, along with tables tracing the application of most of the principles and their results. One writer captured the essence of the whole collaborative writing experience: "our editors allowed us to create a collection of people, not just text and words" (p. 432).

**Marguerite Krupp**
Marguerite Krupp is an STC Fellow, an adjunct professor at Northeastern University, and a technical communicator with more than four decades of experience in the computer industry. She is a frequent presenter at conferences, a playwright, and the author of several articles.

# Review of Four Books on HTML5

Avon J. Murphy

## Introduction

If you've been writing HTML code over the past decade, you're going to find much changed with HTML5. New content tags make it possible to embed graphics, audio, and video without making visitors to your Web sites download plug-ins. New structural tags such as `<nav>`, `<header>`, `<section>`, and `<article>` force you to rethink the organization of your pages. Even if you write some bad code, visitors' browsers are far less apt to crash than in the past. What to do to get started? If you like to punish yourself, spend the next month digesting the full 900-page HTML5 specification (http://www.w3.org/TR/html5/). Or look into one of the four books described below. It's your choice.

## *HTML5 Step by Step*

Faithe Wempen aims *HTML5 Step by Step* squarely at beginners. If you've never written HTML code, you'll appreciate her painstaking explanations of just about everything, including how to download the compressed file of practice code and how to use Notepad. The many reminders and cautions—which would drive experienced developers insane—come one after another to keep you out of trouble.

If you've used other Step by Step books, you'll recognize the series format, which is designed to make books so usable that it's impossible for you to get lost. Thus, you find ample white space, icons indicating tips, compatibility notes, troubleshooting hints, and other special points. Pages have a spacious feel, with ample white space. Screenshots are in grayscale, and headings, bullets, and note text appear in blue. If you prefer electronic text, you have free access to a PDF version of the book from Safari Books Online.

A chapter typically opens with a graphical "Chapter at a Glance" page and learning objectives, provides short code examples and exercises, and ends with a summary page of "Key Points." Screenshots accompany almost every bit of HTML code.

Wempen provides solid details appropriate for neophytes on HTML5 structure and tagging, Cascading Style Sheets (CSS), graphics, navigation, audio and video, and JavaScript. The most successful chapter is "Creating Division-Based Layouts," which compares how to use `<div>` tags with how to use new semantic tags. You might find more questionable inclusion of a 30-page chapter on Microsoft Expression Web. Also of little direct use are the appendixes on accessibility and usability, neither of which mentions HTML5 at all.

If you want a simple-to-read introduction with lots of screenshots, especially if you already feel comfortable with the Step by Step series, this book is your best bet.

(*Disclosure*: I've edited several Step by Step books for Microsoft Press.)

## *HTML5 24-Hour Trainer*

The most exciting of our four books is Joseph W. Lowery and Mark Fletcher's *HTML5 24-Hour Trainer*. The authors see as their primary audience people just learning to construct Web pages. A secondary audience is those who know past versions of HTML but not HTML5.

This book pulls out nearly every stop possible to help you master the technologies and strategies of HTML5. Discussion of the various topics is accompanied by plentiful lists, tables, code snippets, screenshots, and boxes containing warnings and other special information. Each chapter provides at least one detailed "Try It" exercise. A big bonus is the enclosed DVD, which includes 42 video tutorials that reinforce the book's technical instruction very well. (Lowery is a popular author in the Lynda.com instructional video series.) You practice typing code along with the narrator (who provides further comments), using the files available as a single download from the Wrox Web site. This combination of methods lets you learn through reading, listening, watching, and doing at the same time. Although all artwork is done in grayscale, I didn't consciously think of that while reading the book and

# Review of Four Books on HTML5

doing the exercises: I was too busy reading the text and typing while playing the videos.

You get excellent coverage of basic and intermediate topics, particularly the integration of HTML5 and CSS, media in your pages, lists and tables, and JavaScript. Some of the most useful information concerns your options when building forms and the compatibility of HTML5 features with particular browsers.

Given its many useful features and its amount of information, this package is a bargain.

## *Introducing HTML5*

Bruce Lawson and Remy Sharp write for experienced (X)HTML developers who need a concise overview of how they must change their coding practices to take advantage of HTML5. *Introducing HTML5*, on the whole, provides solid explication of most major provisions of the specification; there is no attempt to make this book a teaching text.

The strongest chapters describe making 2D drawings with the `<canvas>` element and setting up data storage without using cookies, those small files you're always deleting as you browse the Web. You also get useful technical detail on accessibility, especially on using the Web Accessibility Initiative's Accessible Rich Internet Applications suite. In some other chapters, the descriptions don't contribute much information beyond what the World Wide Web Consortium (W3C) specification gives you for free.

The authors provide a good, smooth read. Now and then they surprise you with spots of humor, as when they note the disappearance of such elements as `<frame>` and `<blink>`: "You must avoid them as if they were tarantulas, zombies, man-eating tigers, plutonium sandwiches, or Celine Dion songs" (p. 60).

The book design uses little color except for orange in such areas as headings and information boxes. If you aren't reading carefully, the use of numbered lists, sometimes as bullets and sometimes as steps in a process, can be confusing.

The authors make available on the Web the graphics and HTML files for each chapter, as well as links to such resources as W3C documents. It would be much easier if you could simply download all the sample files at once instead of returning to the Web site and clicking individual files one after another. Also, the need to keep the book short means Lawson and Sharp can't refer to the filenames of the samples, so you can spend too much time making sure you have the right files.

As reliable a guide as this is for the established coder, its price is high for what you get.

## *Pro HTML5 Programming*

Experienced Web application coders who know JavaScript can find in HTML5 a strong set of application programming interfaces (APIs), specifications that give them the means to create powerful features. If you're such a developer, Peter Lubbers, Brian Albers, and Frank Salim's *Pro HTML5 Programming: Powerful APIs for Richer Internet Application Development* gives you the details necessary to take advantage of the more promising APIs.

The introductory chapter sets the ground rules for using any API in the new HTML environment. Then comes the good stuff: detailed chapters on the HTML5 Canvas, audio and video, Geolocation, communication, WebSocket, Forms, Web Workers, Web Storage, and Offline Web Application APIs. The authors dissect often lengthy code samples (available as a single download from the Apress Web site), pursuing in depth the why and why not as well as the how of coding decisions. They make especially good use of tables to convey descriptions as well as pros and cons. The one thing that needs improvement is the grayscale screenshots, which sometimes include hard-to-see type.

The writing style is unusually relaxed for a highly technical book. Touches of humor at times sneak in: "If you want to know why or how [the Haversine] formula works, consult a teenager's math textbook" (p. 103).

Perhaps you don't want to become a programmer. But if you do want to do some API documentation or serve more effectively on a team alongside developers, *Pro HTML5 Programming* can arm you with detailed insight that you will find helpful. The amount of usable detail justifies the price, the highest in this roundup.

## References

Lawson, Bruce, & Sharp, Remy. (2011). *Introducing HTML5*. Berkeley, CA: New Riders. [ISBN 978-0-321-68729-6. 224 pages, including index. US$34.99 (softcover).]

Lowery, Joseph W., & Fletcher, Mark. (2011). *HTML5 24-hour trainer*. Indianapolis, IN: Wrox. [ISBN

**TABLE 1. Books on HTML5 Compared**

| | HTML5 Step by Step | HTML5 24-Hour Trainer | Introducing HTML5 | Pro HTML5 Programming |
|---|---|---|---|---|
| **Audience** | **Beginner** | **Beginner to intermediate** | **Advanced** | **Advanced** |
| Major Strengths | Format designed for easy reading and learning<br>Fully detailed explanations, especially on layout strategies<br>Many screenshots and code samples<br>Downloadable code<br>You're encouraged to practice your new skills<br>Comfortingly familiar Step by Step series look | Admirable integration of several instructional methods<br>Surprising amount of video content<br>Downloadable code<br>You're encouraged to practice your new skills<br>Sense of intellectual curiosity<br>Especially strong on forms and browser compatibility | Strongly independent voice on the significance of various features<br>Downloadable code<br>Especially strong on the <canvas> element, data storage, and accessibility<br>No wasted space | Enthusiastically reveals how to fine-tune coding for maximum effect<br>Downloadable code<br>Rigorous analysis of what makes each bit of sample code work<br>Especially strong on HTML5 and CSS integration<br>Natural peer-to-peer tone |
| Major Weaknesses | Contains some irrelevant material<br>Authorial remarks can become irksome<br>Grayscale screenshots<br>Overly familiar Step by Step series look | Grayscale printing | Some descriptions offer little original information<br>Grayscale screenshots<br>Confusing uses of numbered list format<br>Tedious process for downloading sample code<br>No encouragement to practice your new skills | Grayscale printing<br>Implicit rather than direct encouragement to practice your new skills |
| Comments | Trustworthy, detailed guide if you're a beginner who craves handholding. Good value. | Excellent value. Recommended for most HTML coders who haven't reached advanced status. | Trustworthy information delivered in a concise format. Fair value. | The amount of detail compressed into the book makes it a very good value. |
| Rating (5-star scale) | *** | ***** | *** | **** |
| Cost (USD) | $34.99 | $39.99 | $34.99 | $44.99 |

# Review of Four Books on HTML5

978-0-470-64782-0. 300 pages, including index and DVD. US$39.99 (softcover).]

Lubbers, Peter, Albers, Brian, & Salim, Frank. (2010). *Pro HTML5 programming: Powerful APIs for richer Internet application development*. New York, NY: Apress. [ISBN 978-1-4302-2790-8. 284 pages, including index. US$44.99 (softcover).]

Wempen, Faithe. (2011). *HTML5 step by step*. Sebastopol, CA: Microsoft Press. [ISBN 978-0-7356-4526-4. 386 pages, including index. US$34.99 (softcover).]

## About the Author

**Avon J. Murphy** is a technical editor in western Washington. A retired college professor and government writer, he is an STC Fellow, a contractor, and principal in Murphy Editing and Writing Services, specializing in computer and Web technologies. Avon served as Book Review Editor for *Technical Communication* for 17 years.

Sherry Southard, Editor

**The following articles on technical communication have appeared recently in other journals. The abstracts are prepared by volunteer journal monitors. If you would like to contribute, contact Sherry Southard at southards@ecu.edu.**

**"Recent and Relevant" does not supply copies of cited articles. However, most publishers supply reprints, tear sheets, or copies at nominal cost. Lists of publishers' addresses, covering nearly all the articles we have cited, appear in *Ulrich's International Periodicals Directory*.**

**Thanks to J. A. Dawson, who helped me assemble the manuscript for "Recent & Relevant."**

## Collaboration

### *Deriving IT-mediated task coordinator portfolios for global virtual teams*

Sutanto, J., Kankanhalli, A., & Tan, B. C. Y. (2011). *IEEE Transactions on Professional Communication, 54,* 133-151.

"Global virtual teams (GVTs) can provide benefits in terms of lower costs and enhanced performance. However, the realization of these benefits depends on effective GVT task coordination, which faces significant challenges due to time-zone differences and geographical dispersion. Further, there is a lack of understanding of optimal information-technology (IT)-mediated coordination mechanisms for these teams. Based on an in-depth study of project tasks carried out by three GVTs, we uncovered IT-mediated task coordination portfolios (sets of mechanisms) used for effective coordination. The portfolios should fit the GVT's task dependence, members' common time frame, and perceived time constraints in order to be effective."

**Sherry Southard**

### *The influence of sociotechnological mechanisms on individual motivation toward knowledge contribution in problem-solving virtual communities*

Yu, J., Jiang, Z., & Chan, H. C. (2011). *IEEE Transactions on Professional Communication, 54*, 152-167.

"Knowledge contribution in virtual communities is an important issue in the field of knowledge management. Based on Ames's theoretical framework on motivation, we propose a model for knowledge contribution in problem-solving virtual communities (PSVCs). The model includes two second-order individual motivations, with four major mechanisms in PSVCs that are associated with these motivations. Results confirm that only egoistic motives affect members' knowledge contribution in PSVCs. Further, knowledge repository and social identity are found to be important mechanisms for promoting knowledge contribution through egoistic motives. This paper concludes with theoretical and practical implications and provides insights for future research."

**Sherry Southard**

## Communication

### *The communication habits of engineers: A study of how compositional style and time affect the production of oral and written communication of engineers*

Steiner, D. G. (2011). *Journal of Technical Writing and Communication, 41*, 33-58.

"Writing is common skill for many whose job requires them to communicate through business documents. But there are many professionals who seemingly have difficulty with writing. Many engineers are required to write proposals and reports yet have received little formal writing instruction. The purpose of this study was to determine if writing apprehension, their composition process, or the presence of deadlines affects the production of documents. The hypothesis was that engineers have high writing apprehension, generally use a product-based approach, and tight deadlines negatively

affect the end quality. The researcher conducted in-depth interviews with civil engineers to gauge their level of apprehension, learn their personal composition process, and determine how deadlines affect their writing. While the hypothesis was not conclusively supported, the study revealed six key themes into how engineers structure their writing tasks and found that the writing environment of engineers significantly impacts the composition process."

**J. A. Dawson**

### *"Eternal ephemera" or the durability of "disposable literature": The power and persistence of print in an electronic world*

Pimlott, H. (2011). *Media, Culture & Society, 33*, 515-530.

"Popular and academic discussions of the future of print focus on the electronic formats of books and newspapers but ignore some of the most ubiquitous and historically significant, albeit ephemeral, types of print media. This article argues for taking the flyer, leaflet, and pamphlet seriously. These forms of 'disposable literature' are in part facilitated by electronic media and in part able to disseminate messages in ways that electronic media cannot, and thereby provide a bridge between new media and new audiences. There are two major factors that contribute to the durability or persistence, pervasiveness and power of disposable literature in contemporary society: the unique characteristics of print media; and the impact of electronic media in enhancing their production and distribution."

**Sherry Southard**

### *How similar are real estate agents and human-service workers? A study of real estate agents' responses to distressed clients*

Snyder, J. L., Claffey Sr., G. F., & Cistulli, M. D. (2011). *Journal of Business Communication, 48*, 300-318.

"The study of job burnout has focused primarily on workers who hold human-service jobs, such as teachers, nurses, and social workers. Little extant research, however, has explored emotional communication and job burnout among workers from other industries. The present study used the empathic communication model of burnout to explore how interactions with distressed clients affect real estate agents' feelings of burnout and thoughts of quitting. A total of 287 real estate agents and brokers completed an online questionnaire about their empathic responses to client distress, communicative responsiveness, burnout, and thoughts of quitting. Results indicate that the empathic communication model of burnout offers adequate explanation for the relationship between empathy, communication, and burnout for real estate agents. Practical and theoretical implications of these results are discussed."

**J. A. Dawson**

### *Language options for managing: Dana Corporation's philosophy and policy document*

Rogers, P. S., Gunesekera, M., & Yang, M. L. (2011). *Journal of Business Communication, 48*, 256-299.

"This historical case study identifies language components managers may use to articulate shifts in their strategy. The authors analyzed the language revisions and substitutions Dana Corporation's upper management made to their highly significant strategic statement, The Philosophy and Policies of Dana (PPD). A large global vehicle parts supplier, Dana experienced tremendous growth and standing until the late 1990s, when a downturn in the industry necessitated dramatic facility closings and workforce reductions. The authors compared the 1987 and 2004 versions of management's PPD using two frameworks from strategy to guide textual analyses: Campbell's Ashridge Mission Model and Eccles and Nohria's Strategic Triadic, coupled with historical company research and conversations with company officials. Dana's example suggests language options—thematic devices, modifiers, verbs, and sentence subjects—that managers should consider when formulating messages about the strategic changes they envision."

**J. A. Dawson**

### *Moving international technical communication forward: A world Englishes approach*

Bokor, M. (2011). *Journal of Technical Writing and Communication, 41*, 113-138.

"This article explores how the English language contributes to cross-boundary communication failure and establishes that there is an 'English language problem' that has not been adequately addressed in preparing United States native English-speaking students for international technical communication tasks. For example, U.S. technical communication scholars are still grappling with the problems of using English in software internationalization and translating technical communication products across boundaries of national culture and language without privileging Western values and beliefs. The tendency is to assume American culture and American Standard English as the norm, and to identify cultural and linguistic differences as problems only when there is a communication failure or when non-native speakers of English translate product users' manuals and other documents for use by Americans. The article draws attention to the limitations of the current favored strategies for training native speakers in international audience analysis and calls for a revamping of the curriculum to allow for the integration of language-based methodologies. It suggests the incorporation of the World Englishes perspective into training programs to internationalize students' learning experiences."

**Daniel Drahnak**

### *Rethinking the role of value communication in business corporations from a sociological perspective – Why organisations need value-based semantics to cope with societal and organisational fuzziness*

von Groddeck, V. (2011). *Journal of Business Ethics, 100*, 69-84.

"Why is it so plausible that business organisations in contemporary society use values in their communication? In order to answer this question, a sociological, system theoretical approach is applied which approaches values not pre-empirically as invisible drivers for action but as observable semantics that form organisational behaviour. In terms of empirical material, it will be shown that business organisations resort to a communication of values whenever uncertainty or complexity is very high. Inevitably, value semantics are applied in organisations first when the speakers are uncertain about which stakeholders to whom they have to address (uncertainty) or when different stakeholder groups have to be addressed simultaneously (complexity); second, when the identity of the organisation has to be described; and third, when future strategic options that cannot be expressed by quantitative terms have to be communicated. Values accordingly play a role in organisational practice when certain aspects are indeterminate. Therefore, they are a means for organisations to communicate under *fuzzy circumstances*. On the basis of these findings, new approaches to value management can now be formulated."

**Christine Cranford**

### *Tenure, status, and workload: Fundamental issues among business communication faculty*

Lawrence, H., & Galle, W. P. (2011). *Journal of Business Communication, 48*, 319-343.

"This article is based on the work of the Non-Tenure-Track Committee of the Association for Business Communication (ABC). Results of research performed by the committee are discussed. Focus is on issues of tenure, status, and workload that affect instructors of business communication and, the authors purport, that affect the livelihood of the academic field of business communication. Placed in the context of the national trend in academe to hire non-tenure-track faculty, the authors review results of surveys of ABC members that indicate how business communication faculty fit within that national landscape. Additionally, the survey results offer a glimpse at information from participants about tenure status, academic departments or homes, salaries, and responsibilities associated with appointments. The article ends with a discussion and the recommendations that members of the business communication community may want to consider as a means of strengthening and improving the status and working conditions many ABC members face."

**J. A. Dawson**

# Design

### *Design principles for visual communication*

Agrawala, B., Li, W., & Berthouzoz, F. (2011). *Communications of the ACM, 54*(4), 60-69.

"Visual communication via diagrams, sketches, charts, photographs, video, and animation is fundamental to the process of exploring concepts and disseminating information. The most-effective visualizations capitalize on the human facility for processing visual information, thereby improving comprehension, memory, and inference. Such visualizations help analysts quickly find patterns lurking within large data sets and help audiences quickly understand complex ideas …. [The authors] have used [a] three-stage approach to build automated visualization design systems in two domains: cartographic visualization and technical illustration." Content is illustrated with eight figures.

**Sherry Southard**

# Education

### *Assessing typographic knowledge using timed tests*

Ishizaki, S. (2011). *IEEE Transactions on Professional Communication, 54*, 105-121.

"While researchers and instructors of technical and professional communication have embraced the importance of visual communication skills in recent years, little systematic effort has been made to develop assessment instruments that measure visual design skills. This paper presents a project that examines timed tests as a means of measuring a student's ability to solve design problems. The process and rationale for the test designs and the results of a series of empirical studies are discussed. The results of the studies suggest that timed tests can be a viable complement to the project-oriented assessment approach suggested by prior studies."

**Sherry Southard**

### *A bibliography of works published in the history of professional communication from 1994-2009: Part 1*

Moran, M., & Tebeaux, E. (2011). *Journal of Technical Writing and Communication, 41*, 193-214.

"Part 1 [covers] bibliographies and methodological statements; disciplinary self-consciousness; the classical period; the medieval period; Renaissance technical communication, Renaissance scientific writing; Restoration and Eighteenth-Century English commercial discourse, scientific discourse, English and American Women's scientific discourse, American technical communication; Nineteenth Century American technical communication, English and American technical communication by women."

**Daniel Drahnak**

### *Globalizing writing studies: The case of U.S. technical communication textbooks*

Matsuda, A., & Matsuda, P. K. (2011). *Written Communication, 28*, 172-192.

"In an increasingly globalized world, writing courses, situated as they are in local institutional and rhetorical contexts, need to prepare writers for global writing situations. Taking introductory technical communication in the United States as a case study, this article describes how and to what extent global perspectives are incorporated into writing. Based on an analysis of eight textbooks and a closer analysis of four of them, we illustrate the representation of technical communication and communicators as well as multiculturalism and multilingualism in these textbooks and point out the limitations vis-à-vis the cultural and linguistic complexity of global technical communication in today's world. We conclude by considering implications for U.S. college composition as it continues to contribute to the international discourse of writing studies."

**Sherry Southard**

### *Meeting students where they are: Advancing a theory and practice of archives in the classroom*

Saidy, C., Hannah, M., & Sura, T. (2011). *Journal of Technical Writing and Communication, 41*, 173-191.

"This article uses theories of technical communication and archives to advance a pedagogy that includes archival production in the technical communication classroom. By developing and maintaining local classroom archives, students directly engage in valuable processes of appraisal, selection, collaboration, and retention. The anticipated outcomes of this work are the critical practice of making connections, the decentering of the self, the ability to work through noise, and the ability to imagine future users of the archive. The authors conclude that local classroom archives are one new means of meaningful instruction in the technical communication classroom and the local archive concept has great potential for further development."

**Daniel Drahnak**

### *Staffing your documentation team with co-op students: A program that works*

Bishop, T., & Kessler, J. (2011). *Best Practices, 13*, 41-44. [Center for Information-Management Development]

"Qualified [co-op] students in a well-managed program" can help to alleviate staffing and budget pressures in technical publications divisions while they gain in-depth professional experience. This article describes the extensive co-op partnership between Sybase (an SAP company) and the University of Waterloo, Ontario, Canada. Critical success factors for the program include recruiting motivated, well-prepared students; supervising each student consistently; training students throughout the co-op term; giving them meaningful assignments; integrating them into company activities; and providing opportunities for interacting with other co-op students. The program strives to provide "a positive and challenging learning experience" so that students take away "a real understanding of what contemporary technical writing entails."

**Lyn Gattis**

### *Using I, Robot in the technical writing classroom: Developing a critical technology awareness*

Toscano, A. A. (2011). *Computers & Composition, 28*, 14-27.

"This article calls for technical writing courses to be more engaged in discussions on critical technological awareness. Being critically aware of technology means looking beyond a socially constructed artifact's assumed practical benefit and critiquing its effects and development. All discourse surrounding technology should be the purview of the field of technical writing. Because much technical writing pedagogy ignores cultural issues related to technology, this article promotes student engagement in discussions about social constructions of technology to foster critical thinking. This article concludes with a discussion of student responses to an essay assignment based on Isaac Asimov's novel *I, Robot*.... The novel offers a chance for students to reflect on how contemporary technologies, such as computers, are enmeshed into the social fabric of twenty-first-century life. Additionally, *I, Robot* generates classroom discussions that bolster student engagement and highlight the impact of contemporary (and future) technologies on workplace practices and the culture at large."

**Sherry Southard**

### *Using the dialogic communication model to teach students to write a report introduction*

Lee, C. (2011). *IEEE Transactions on Professional Communication, 54*, 201-210.

"This paper presents the use of the dialogic communication model to teach students how to write a report introduction. In the case study presented, the students engaged in discussions and reflections regarding the contextual complexities in the writers' and readers' organizational environments, which helped them adapt their writing to their readers' needs and thought processes. The thinking process that students go through in making their writing more reader centered using this model could be a useful springboard to help students adopt the thinking processes of professional engineers."

**Sherry Southard**

# Information Management

### *Join the [technical] conversation*

Cross, A. (2011). *Best Practices, 13*, 50-55. [Center for Information-Management Development]

Although companies must restrict some corporate information to employees or customers, a policy of openness for other information, including product documentation, can provide more rewards than risks. The author addresses concerns that openness enables competitors to "duplicate the functionality" or exploit the weaknesses of a product, or gives hackers entry into the system. However, open documentation can signal market innovation and social responsibility, build trust, and engage customers. A policy of openness also acknowledges current practices of documentation wikis and online information searches. Further, it can help to ensure users find authoritative product information online instead of user blogs or "unofficial documentation."

**Lyn Gattis**

### *Road blocks to CMS adoption*

Toth, P., & Gotsill, G. (2011). *Best Practices, 13*, 74-76. [Center for Information-Management Development]

This article summarizes a 2011 survey conducted to learn more about why companies do or do not use content management systems. Of the 100 respondents, 67 percent think a CMS could "reduce development costs and increase work efficiency"; however, "only 29 percent work for an organization that has implemented a CMS." Those using a CMS report they have "lowered the cost of developing and maintaining content by employing content reuse" and see "benefits of quickly making corrections and updates to already-published content." Reported obstacles to using a CMS include cost, organizational culture, lack of IT support, and time required for configuring the system.

**Lyn Gattis**

### *Road to change*

Herrick, T. (2011). *Best Practices, 13*, 33, 36-38. [Center for Information-Management Development]

This article uses road-construction analogies to discuss documentation redesign. For example, the author compares linear document systems to a single "road" connecting a group of topics, or "communities." Although simple to implement, this method of arranging by order, not importance, means that updates likely require system-wide changes. A dense network linking each document to almost every other document provides users with considerable information; but this approach makes maintaining links difficult, and information is sometimes duplicated. Limiting links strategically to roads between "heavy traffic towns" can reduce maintenance time and user frustration. However, the author cautions against "extreme minimalism" that provides insufficient detail for some topics. The author suggests careful planning so as to devote the greatest resources to heavily traveled routes while maintaining some access to the side roads as well.

**Lyn Gattis**

# Intercultural Communication

### *An analysis of a communication training program for Chinese managers*

Tuleja, E. A., & Roberts, E. (2011). *IEEE Transactions on Professional Communication, 54*, 185-200.

"This research is based on an analysis of a management communication training program used by one large US international hotel company to train newly promoted supervisors and managers in Hong Kong and mainland China. The key communication competencies emphasized in the training materials were listening effectively, giving and receiving feedback, using verbal language correctly, using effective nonverbal communication, and displaying empathy. Implications of this study indicate that planning and executing any communication training program must be done mindfully, which includes comprehensive follow-up

through reassessment and coaching by the upper managers in order to support employees' transfer of training."

**J. A. Dawson**

### *Field convergence between technical writers and technical translators: Consequences for training institutions*

Gnecchi, M., Maylath, B., Mousten, B., Scarpa, F., & Vandepitte, S. (2011). *IEEE Transactions on Professional Communication, 54*, 168-184.

"As translation of technical documents continues to grow rapidly and translation becomes more automated, the roles of professional communicators and translators appear to be converging. This paper updates preliminary findings first presented at the 2008 International Professional Communication Conference, Montreal, QC, Canada. It analyzes trends revealed from recent surveys and recommends follow-up research to determine if the trends may continue and become entrenched. The authors conclude with recommendations for academic programs interested in adjusting to the trends."

**J. A. Dawson**

### *GMAT-AWA score as a predictor of success in a managerial communication course*

Hill, K. L., Hyne, G. E., Joyce, M. P., & Green, J. S. (2011). *Business Communication Quarterly, 72*, 103-118.

"Because communication skills, especially writing, are such an integral part of managerial work, it may be postulated that these skills are associated with managerial success. Yet evidence of writing competency is not universally considered for admission to MBA programs. The purpose of this study was to investigate the possible correlation between the Analytical Writing Assessment Section (AWA) of the GMAT exam and a 'critical thinking' writing assignment that is similar to the AWA. Results indicate that the AWA is significantly correlated with achievement, not only on the writing assignment but also with the final grade in a managerial communication course."

**J. A. Dawson**

### *Intercultural organizational communication: The social organizing of interaction in international encounters*

Lauring, J. (2011). *Journal of Business Communication, 48*, 231-255.

"Intercultural communication has mainly been described in terms of national differences disturbing the sending and receiving of messages. In this article, it is argued that the local organizational context has to be taken into account. By linking Bourdieu's theories on the social organization of differences to recent theories of organizational communication, the focus of the article is directed at describing the impact of informal and power-related aspects in intercultural communication. The usefulness of a theory on intercultural organizational communication is illustrated by the results of an ethnographic field study on Danish expatriates in a Saudi subsidiary."

**J. A. Dawson**

### *Lacuna or universal? Introducing a new model for understanding cross-cultural audience demand*

Rohn, U. (2011). *Media, Culture & Society, 33*, 631-641.

Rohn proposes "the Lacuna and Universal Model that provides a theoretical classification, systematization and terminology of the various reasons that may lie behind the cross-cultural success or failure of media content. The Lacuna and Universal Model is an analytical framework that helps to understand cross-cultural audience demand by taking into account not only the immediate audience–text relationship, but also the contextual factors that may influence this demand, and the role that media publishers and transmitters may play in the success of cross-cultural media trade."

**Sherry Southard**

### *Linking contextual factors with rhetorical pattern shift: Direct and indirect strategies recommended in English business communication textbooks in China*

Wang, J., & Zhu, P. (2011). *Journal of Technical Writing and Communication, 41*, 83-107.

"Scholars have consistently claimed that rhetorical patterns are culturally bound, and indirectness is a

defining characteristic of Chinese writing. Through examining how the rhetorical mechanism of directness and indirectness is presented in 29 English business communication textbooks published in China, we explore how English business communication textbook writers in China keep up with the contextual changes in the Chinese society and how the rhetorical mechanism of directness and indirectness is locally situated in the English business communication teaching practices in China. We conclude that the pedagogical strategy on directness and indirectness represented in Chinese English business communication textbooks echoes the same strategy favored by scholars in the United States."

**J. A. Dawson**

### *Tackling the sustainability dilemma: A holistic approach to preparing students for the professional organization*

Mabry, S. (2011). *Business Communication Quarterly, 72*, 119-137.

"Increased knowledge of business sustainability as the basis of a holistic approach to value creation has inspired many managers to integrate ecological and social stewardship into their strategic business innovation plans. However, the coverage of sustainability issues in business courses remains small at many universities. This article illustrates how business communication students can become cognitively, behaviorally, and emotionally involved in the analysis and evaluation of the complex sustainability paradigm via an assignment focusing on sustainability. The approach integrates several levels of learning, stretching students' cognitive skills and enhancing the emotional competencies and behavioral skills needed to enter high-level business jobs."

**J. A. Dawson**

## Professional Issues

### *Verbal abuse in the Army of the Cumberland: William Rosecrans' acid tongue as a major factor in the Union defeat at the Battle of Chickamauga*

Loges, M. (2011). *Journal of Technical Writing and Communication, 41*, 161-171.

"Recent studies suggest that verbal abuse and harassment are relatively common in the workplace. These same studies show that such abuse decreases worker satisfaction, undermines relationships, and distracts workers from functioning as team members committed to common goals. This study examines a classic example of verbal abuse and harassment in the work-place—that of Union Civil War General William Rosecrans toward his subordinates during a campaign conducted in Tennessee during 1863. It can, in fact, be argued that Rosecrans' abusive language was a major factor in the Union defeat at the Battle of Chickamauga in September of 1863."

**Daniel Drahnak**

## Public Relations

### *Connecting writers with readers*

Cantrell, C. (2011). *Best Practices, 13*, 71-73. [Center for Information-Management Development]

To increase the quality and volume of interactions between its customers and online documentation writers, ExactTarget attaches a web-based feedback form to each document page. The form identifies the writer of that topic and routes customer emails directly to that person. "The intention is to let each reader know that a real person is on the other end of the documentation who knows the topic, who can help clarify parts that are not clear, and even improve the documentation, if necessary." This approach to feedback has improved readers' experiences with product and documentation and has increased the writers' understanding of their audiences.

**Lyn Gattis**

## Scientific Writing

### *Evaluating applications for an informal approach to information design: Readers respond to three articles about nursing*

Willerton, R., & Hereford, M. (2011). *Journal of Technical Writing and Communication, 41*, 59-82.

"Although books in the For Dummies series and other similar series have found commercial success, the approach to information design they use has not received much attention in technical communication journals. This article reports on readers' responses to information presented in the magazine Nursing Made Incredibly Easy! and two other nursing journals. Three groups of readers (two groups of nursing students and one group of nursing faculty members) responded to three articles they read by completing questionnaires and participating in focus groups. Nursing Made Incredibly Easy! was regarded as easy to read and as a good starting point for less-experienced readers, but its tone and style elicited some strong objections as well. The article provides observations and recommendations about using an informal approach to information design."

**Sherry Southard**

### *Insights from illustrators: The rhetorical invention of paleontology representations*

Northcut, K. (2011). *Technical Communication Quarterly, 20*, 303-326.

"This study focuses on the intersection of visual rhetoric with rhetoric of science by examining the rhetorical context in which natural science illustrators operate as they represent paleontology. Field methods were employed to study the rhetorical context in which paleontology becomes represented through art; this article reports the findings from the field study and contextualizes the study in rhetorical theories of invention and a discussion of social versus scientific facts. The research highlights some differences between what experts know and what public audiences perceive, offering insight into why those differences exist."

**Amber F. Rach**

### *Scientific visuals, language, and the commercialization of a scientific idea: The strange case of the prion*

Reeves, C. (2011). *Technical Communication Quarterly, 20*, 239-273.

"In the field that investigates infectious brain diseases such as mad cow disease, the verbal and visual packaging of scientific visuals associated with identifying the agent, prion, its processes, and structure served the community ritual of establishing belief in a highly unorthodox phenomenon. Visual promotion fed into cultural expectations of single agents and simple processes, even though the actual agency and disease process have proven highly complex and perhaps unknowable."

**Amber F. Rach**

### *"A textbook case revisited": Visual rhetoric and series patterning in the American Museum of Natural History's horse evolution displays*

Dyehouse, J. (2011). *Technical Communication Quarterly, 20*, 327-346.

"This article describes the development of visual rhetoric in a historically significant museum exhibit. The study documents rhetorical change in the museum's displays, specifically in visual series depicting the horse's evolutionary development. The study also exposes the purpose of series patterning in the renovated display and the multiple views on scientific visualization this display implies. Such an analysis suggests the broad range of strategies in visual rhetoric available to science communicators working in the area of science popularization."

**Amber F. Rach**

### *Warp and weft: Weaving the discussion threads of an online community*

Arduser, L. (2011). *Journal of Technical Writing and Communication, 41*, 5-31.

"The Pew Internet & American Life Project reports that 86% of Internet users living with a disability or chronic illness have looked for health information online …. And while so-called e-patients often start this search for information, many find themselves led to communities

that provide this and more, such as Tu Diabetes, an online social network site. This pause in what can seem like an endless search for answers may be one that health professionals can gain insight from. Such extended pauses may give insight into the values of this particular community. This article provides the results and analysis of a study using ethnographic methods and rhetorical analysis to examine the texts posted by members of the social networking site Tu Diabetes in order to discern the values held by this community."

**Sherry Southard**

## Social Media

### *Bringing social media to the writing classroom: Classroom Salon*

Kaufer, D., Gunawardena, A., & Cheek, A. (2011). *Journal of Business and Technical Communication, 25*, 299-321.

"This article introduces a new IText technology called Classroom Salon. The goal of Classroom Salon is to bring some of the benefits of social media—the expression of personal identity and community—to writing classrooms. It provides Facebook-like features to writing classes, where students can form social networks as annotators within the drafts of their peers. The authors discuss how the technology seeks to capture qualities of historical salons, which also built communities around texts. They also discuss the central features of the Classroom Salon system, how the system changes the dynamics of the writing classroom, current efforts to evaluate it, and future directions."

**Alexis Poe Davis**

### *Building and maintaining contexts in interactive networked writing: An examination of deixis and intertextuality in instant messaging*

Haas, C., Carr, B. J., & Takayoshi, P. (2011). *Journal of Business and Technical Communication, 25*, 276-298.

"In this article, the authors answer the call of the IText manifesto to use ITexts to explore fundamental issues of writing, describing instant messaging (IM) as a form of interactive networked writing (INW) and showing how IM writers discursively construct contexts. Specifically, they argue that writers use (a) deixis to build and maintain material contexts and (b) intertextuality to construct sociocultural contexts. Four intact IM transcripts were coded for instances of four kinds of deixis—space, time, person, and object—and for instances of intertextuality. Results showed that IM writers use all four kinds of deixis and that deictic elements made up almost 10% of the total words of the transcripts. In addition, two kinds of intertextual elements— direct quotation and cultural referents—were used to invoke, build, and sometimes undermine social and cultural contexts. The authors also discuss some of the material affordances and constraints of writing and conclude by arguing that INW is literally dialogic."

**Alexis Poe Davis**

### *Contextualizing experiences: Tracing the relationships between people and technologies in the social web*

Potts, L., & Jones, D. (2011). *Journal of Business and Technical Communication, 25*, 338-358.

"This article uses both actor network theory (ANT) and activity theory to trace and analyze the ways in which both Twitter and third-party applications support the development and maintenance of meaningful contexts for Twitter participants. After situating context within the notion of a 'fire space,' the authors use ANT to trace the actors that support finding and moving information. Then they analyze the 'prescriptions' of each application using the activity-theory distinction between actions and operations. Finally, they combine an activity-theory analysis with heuristics derived from the concept of 'findability' in order to explore design implications for SocialWeb applications."

**Alexis Poe Davis**

### *IText reconfigured: The rise of the podcast*

Tulley, C. (2011). *Journal of Business and Technical Communication, 25*, 256-275.

"The podcast is a unique configuration of IText precisely because it foregrounds sound in the current cultural moment of secondary orality. This return to

an oral–aural tradition offers several unique benefits. Podcasts adapt well to today's unstructured work spaces. Moreover, podcasts blur boundaries between virtual and face-to-face communication and virtual and physical spaces. Finally, podcasts are fragmented, reflecting the fluidity of previous ITexts; yet, unlike ITexts, podcasts mostly exist as complete, scripted texts. This article raises questions concerning what the podcast contributes to overall knowledge of how texts are mediated through evolving information technologies."

**Alexis Poe Davis**

### *The social media release as a corporate communication tool for bloggers*

Pitt, L. F., Parent, M., Steyn, P. G., Berthon, P., & Money, A. (2011). *IEEE Transactions on Professional Communication, 54*, 122-132.

"This study examines the impact of a new communication tool, the social media release (SMR), on bloggers. Specifically, we seek to determine what factors will influence bloggers' intent to use SMRs or their components. Our global survey of 332 bloggers finds that bloggers' perceptions of the effectiveness of the SMR and the use of SMRs by companies positively affect their decisions to use SMRs now and in the future. We also find that bloggers' current use of SMRs influences their decisions to continue using SMRs. Implications on the use of SMRs as corporate communication tools are discussed."

**J. A. Dawson**

### *Transdisciplinary Itexts and the future of web-scale collaboration*

Fernheimer, J.W., Litterio, L., & Hendler, J. (2011). *Journal of Business and Technical Communication, 25*, 322-337.

"Changes in Web infrastructure have allowed ITexts to become a vehicle for transdisciplinary Web-scale collaboration so that large-scale teams can create new knowledge despite differences in team members' disciplinary training, geographic location, and levels of expertise. In this article, the authors define Web-scale collaboration and illustrate the need for transdisciplinary approaches to problem solving. Then they introduce heuristics for creating and evaluating such transdisciplinary, collaborative Web-scale ITexts, drawing on examples generated at a workshop sponsored by the National Science Foundation that was held at Rensselaer Polytechnic Institute in April 2010."

**Alexis Poe Davis**

## Technology

### *Business impact of web 2.0 technologies*

Andriole, S. J. (2010). *Communications of the ACM, 53*(12), 67-79.

"This article describes research designed to measure the impact of the business value of wikis, blogs, podcasts, folksonomies, mashups, social networks, virtual worlds, crowdsourcing, and RSS filters—all Web 2.0 technologies. Properly deployed, they may well permit companies to cost-effectively increase their productivity and, ultimately, their competitive advantage; the research reported here includes results of interview, observation, and survey data-collection from select companies and industries primarily in the U.S. across six performance areas: knowledge management, rapid application development, customer relationships management, collaboration/communication, innovation, and training. The results include caution, skepticism, and a significant contribution to collaboration and communication. Wikis, blogs, and RSS filters have had the greatest impact, while virtual worlds have had virtually none."

**Sherry Southard**

### *Communications and transport: The mobility of information, people and commodities*

Morley, D. (2011). *Media, Culture & Society, 33*, 743-759.

"In a context where the study of communications tends to focus only on the mobility of information, to the neglect of that of people and commodities, this article explores the potential for a closer integration between the fields of communications and transport studies. Against the presumption that the emergence of virtuality means that material geographies are no longer of consequence, the role of mediated 'technologies of distance' is considered here in the broader contexts

of the construction (and regulation) of a variety of physical forms of mobility and the changing modes of articulation of the virtual and material worlds."

**Sherry Southard**

### *Reading revolutions: Online digital text and implications for reading in academe*

Cull, B. W. (2011). *First Monday, 16*(6), n.p. [http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/index]

"While the Internet is a text-saturated world, reading online screens tends to be significantly different from reading printed text. This review essay examines literature from a variety of disciplines on the technological, social, behavioural, and neuroscientific impacts that the Internet is having on the practice of reading. A particular focus is given to the reading behaviour of emerging university students, especially within Canada and the United States. A brief overview is provided of the recent transformation of academic libraries into providers of online digital text in addition to printed books and other materials, before looking at research on college students' preferences for print and digital text, and the cognitive neuroscience of reading on screen."

**Sherry Southard**

### *Technological literacy as network building*

Swarts, J. (2011). *Technical Communication Quarterly, 20*, 274-302.

"Following recent work to advocate a strongly social understanding of technological literacy, this article considers how networking technologies are reshaping our understanding of the social. In this context, technological literacy can be understood as a process of constructing the networks in which literate action is defined. I explore the role of technological literacy as a force of network building accomplished through a mechanism of translation. From the comments of experienced technical communicators, I make observations about how technical communicators are taught to be technologically literate."

**Amber F. Rach**

## Usability Studies

### *Driving deliverables by listening to the voice of the customer*

Kratky, J. (2011). *Best Practices, 13*, 39-40. [Center for Information-Management Development]

Documentation centered on "customer requirements and customer satisfaction" instead of "functional specifications" improves customer success and document usability, according to this article. The first step in a customer-driven approach is to determine what you want to learn from customers about your documentation. Next, identify sources—such as surveys, social networking tools, trade show events, and online forums—that will provide the right types of data to answer your questions; multiple data sources will give greater weight to your conclusions. Finally, summarize the collected data and distill it into "a manageable set of frequently occurring common themes." Let customers know their comments have been received, the author notes, so they will continue to submit feedback.

**Lyn Gattis**

### *Using storytelling to elicit design guidance for medical devices*

Gausepohl, K., Winchester III, W. W., Arthur, J. D., & Smith-Jackson, T. (2011). *Ergonomics in Design 19*(2), 19-24.

"Medical device designers must understand the complex context of use within a health care environment to ensure product usability. Designers must overcome domain-specific obstacles during usability research, such as patient privacy standards, which prevent designers from observing practitioners in context. In this project, we investigated storytelling as an alternative elicitation method for medical device requirements when direct observations are limited or not possible. While gathering requirements for an infusion pump, we compared the types of information elicited by focus groups, interviews, and storytelling sessions. Several advantages and implications for the use of story-telling in usability research are discussed."

**Sherry Southard**

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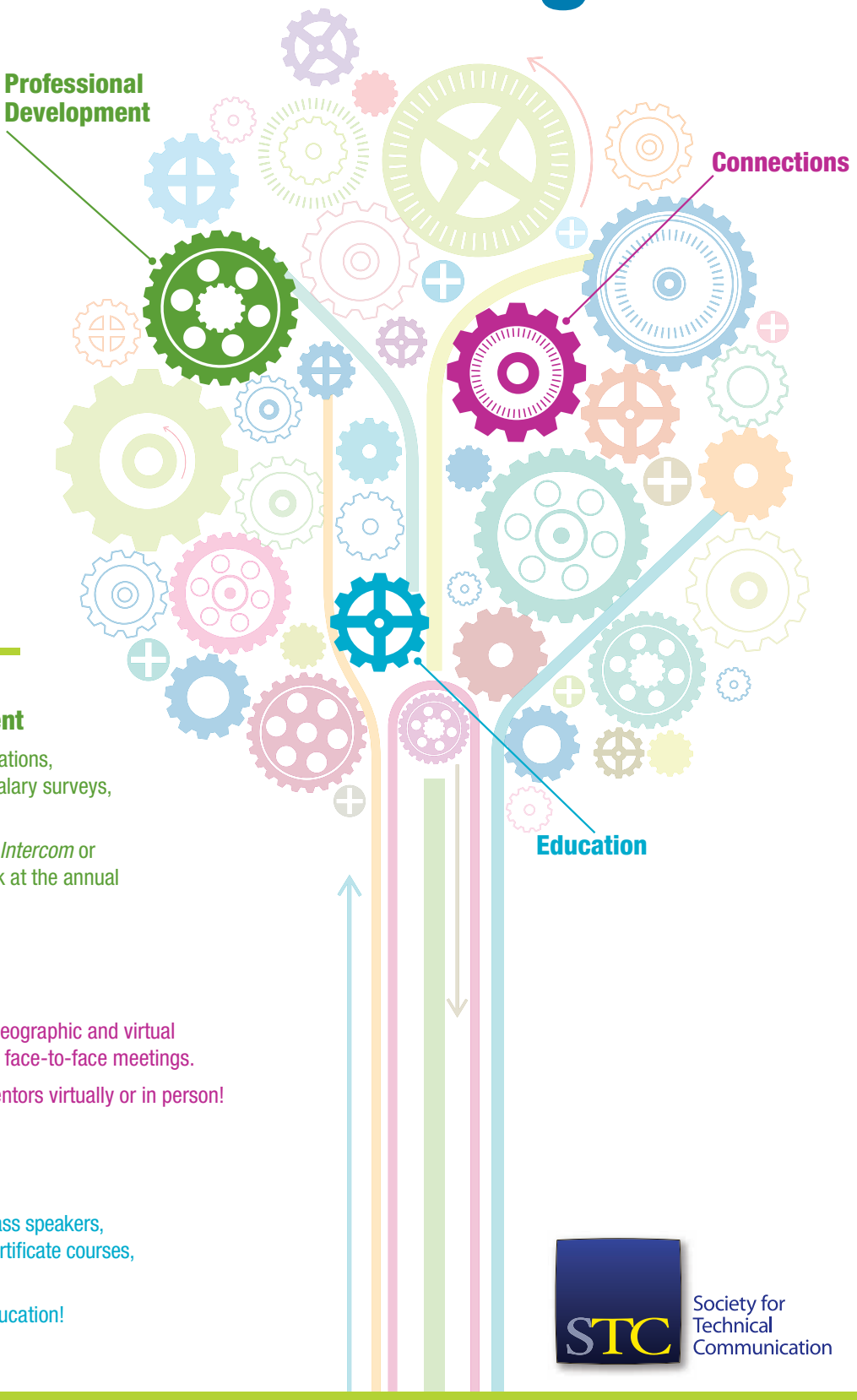


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