

Why Isn't Technical Communication's Definition as Concise as its Practices?

No one dislikes the questions, “What’s your major?” or “What do you do for a living?” like technical communicators. Because technical communicators wear so many hats, it can be challenging to pin down exactly what our job is to explain it to people outside of the field. The purpose of this analysis is to gain insight from technical communicators in the field and current job advertisements to identify key skills, practices, and job terms used by modern technical communicators.

In 2005, Rainey and Daytom interviewed technical communication managers to evaluate the skills future technical communicators need for job success. In 2009, Lanier wrote a follow-up article using a corpus of job ads to determine core skills of Technical Communication. In this report, I combine both methods and evaluate the skills, tools, and practices of technical communicators through interviews with technical communicators and corpus analysis.

I conducted face-to-face and phone interviews with each respondent. I asked questions about the tools, technology, and skills needed for each respondent’s field, but also asked about practices in the field that would not be listed in job ads. I also surveyed the corpus of job listings using AntConc corpus analysis software. The job titles, job descriptions, and required skills sections summarized the main duties of the jobs listed. I then compared and contrasted my findings to further understand the technical communication field.

Method

Contacting and Interviewing Technical Communicators

I used two methods to find technical communicators for this analysis:

- Searching LinkedIn
- Asking friends and family for connections

I searched for technical communicators on LinkedIn using the keywords technical writer, technical marketer, or process writing. I then searched each user’s profile for an email or a personal blog that included contact information. I emailed six technical communicators, and one responded.

I also asked friends and family for contacts in the technical communication field. Of the three contacts, all three confirmed, but only two completed my interview.

The three people I interviewed are

- Heather Steele – Owner and Chief Marketing Officer (CMO) of Blue Steele Solutions
- Laura McKnight – Grant Writer for reStart Inc.
- Michael Alford – (Retired) Director of Data Marketing for Fireman’s Fund Insurance Company

I conducted the interviews differently for each person. I conducted a face-to-face interview with Heather Steele and a phone interview with Laura McKnight and Michael Alford. I sent one responder an email survey but never received the results. The interviews primarily answered eight survey questions regarding tools and practices of a technical communication career with follow-up questions to clarify answers. Appendix A includes the list of questions.

Analyzing the Corpus

I documented and analyzed data from the complete corpus of job ads using pen and paper and AntConc corpus analysis software. I used a different method to find the information needed for the three categories:

- **Job Ad Titles:** I skimmed the corpus and compiled a complete list of job titles. I tallied each job ad and used a voice-to-text tool to create a complete list of job titles. I examined the text in AntConc to find the number of hits for each term and grouped the titles by related terms.
- **Job Descriptions:** I searched for “Duties” and “Requirements” for a general idea of what I would find in the Job Description sections of the job ads. Then I searched for key terms related to my initial analysis. I also looked other general terms with several hits to examine those terms place in the job ads.
- **Required Skills:** I skimmed the “Skills” sections of the job ads and analyzed key words that often appeared in the skills section. I also examined different hard and soft skills with several hits in the Word List section of AntConc. I also used the term “must” to find necessary skills.

Results

Key Findings from Interview

Tools and Technology

The tools used by technical communicators change based on the job. A technical communicator with a marketing focus uses tools that are focused on design and management as opposed to a grant or proposal writer who uses text programs. Table 1 shows the complete list of programs needed for each job.

Table 1: Jobs and Tools

Person / Job	Tools
Heather Steele CMO	Adobe Creative Suite (Illustrator) Wordpress <ul style="list-style-type: none"> • HTML • CSS • NPHP • Some Javascript Notepad Productivity Freshbooks Capsule CRM Google Drive
Laura McKnight Grant Writer	Microsoft Office (Word, Excel, and Powerpoint) Online Databases Google Docs
Michael Alford Director of Data Marketing	Lotos Notes (Similar to Google Drive) BI Query Excel Unix Servers Data Dictionary

Attitudes towards technology also differed between the professions. Heather and Michael, who use more tools in their jobs, state that learning new technology is “incredibly” (H. Steele, Personal Interview, 2015) or “extremely” (M. Alford, Phone Interview, 2015) valuable whereas Laura, who uses minimal tools, claims that learning the basics of technical writing is more important than adapting to new technology.

However, when asked about an experience adapting to new technology, the respondents claimed that adapting is necessary and beneficial. Heather stated that the biggest change in technology in her career was changing from the web-hosting site Joomla to Wordpress. The switch was necessary due to dropping support and lack of developers for Joomla. Her previous experience with Joomla both helped and hindered learning Wordpress. Laura, who has been working in the field for several years, explained that the biggest change in her career was switching from primarily print deliverables to online deliverables. Although adapting to online deliverables was difficult, Laura claimed the change was beneficial to her career. Michael noted that the movement to personal computers impacted his career. The challenge was to convince managers of his vision to adapt to serving customers with instantaneous online reports.

When asked about the most important technical skill, all three communicators responded with a soft skill. Although Heather uses several tools in her career, she states that her most important technical skill is flexibility. She explained that being flexible means she

can cater to several different businesses and their needs. Laura stated that her most important technical skill is Internet searching to find information needed to find RFPs and information needed to write grants. Michael explained that confidence is his most important technical skill since he often needed to convince executives to act and explain is reasoning for certain actions.

Finally, the definitions and applications of digital literacy also differed between jobs. Table 2 shows each person's description of digital literacy and how digital literacy relates to their job.

Table 2: Definitions and Applications of Digital Literacy

Person / Job	Definition of Digital Literacy	Application of Digital Literacy
Heather Steele CMO	How people consume and create content using the Internet	Help clients find customer level of digital literacy
Laura McKnight Grant Writer	The basic skills of working with a computer (sending email, searching the web, etc.)	Wrote a grant for digital literacy program at homeless shelter (computer lab with employment and digital literacy training)
Michael Alford Director of Data Marketing	"Present the most complex information in the most consistent way that is accurate and verifiable. (Phone Interview, 2015)"	Ensured that deliverables are easy to understand for the user: whether a client or a mainframe engineer

Practices

Although the tools used by technical communicators changed based on the career, the practices did not change much between jobs. Technical marketers and grant writers work both collaboratively and independently. According to both Heather and Lauren, collaboration is evident in management whereas content creation is independent. Michael, as a director of data marketing, explained that his work was independently collaborative. Instead of relying on in-house workers, he outsourced to experts to "collaborate with the best minds to build the right solutions" (Phone Interview, 2015).

Due to the independent and collaborative nature of technical communication, I asked responders if they could work from home if needed. All three responders said not only is it possible, but they previously or currently work(ed) from home. Michael even noted that working portably is necessary for corporate jobs. However, the ability to work from home has its detriments. When asked if their jobs interfered with personal or family time, all three respondents confirmed that technical writing does spill into overtime hours. At times, a career in technical communication can even be a "juggling act" (M. Alford, Phone Interview, 2015) to ensure success in both career and family life.

Key Findings from Corpus Analysis

Job Title Analysis

The job corpus contained approximately 112 job titles. Some job postings included more than one title while some job postings did not contain a discernable title. Of the 112 job titles, technical writer appeared the most with 44 hits. The top job titles are listed below:

1. Technical Writer (44 hits)
2. Content Strategist (6 hits)
3. Proposal Writer and Technical Editor (5 hits)
4. Technical Communicator (3 hits)

Although there are 49 different job title names, most can be grouped into similar categories. For example, six job ads were for user experience (UX) specialists, but none of the job titles were the same. Figure 1 shows the number of different job titles for each discipline of technical communication (some job titles cross into two disciplines). The job titles also used several different terms to describe each position. Figure 2 of the next page demonstrates which terms show up the most in the job titles.

Figure 1: Technical Communication Disciplines Based on Job Ad Titles

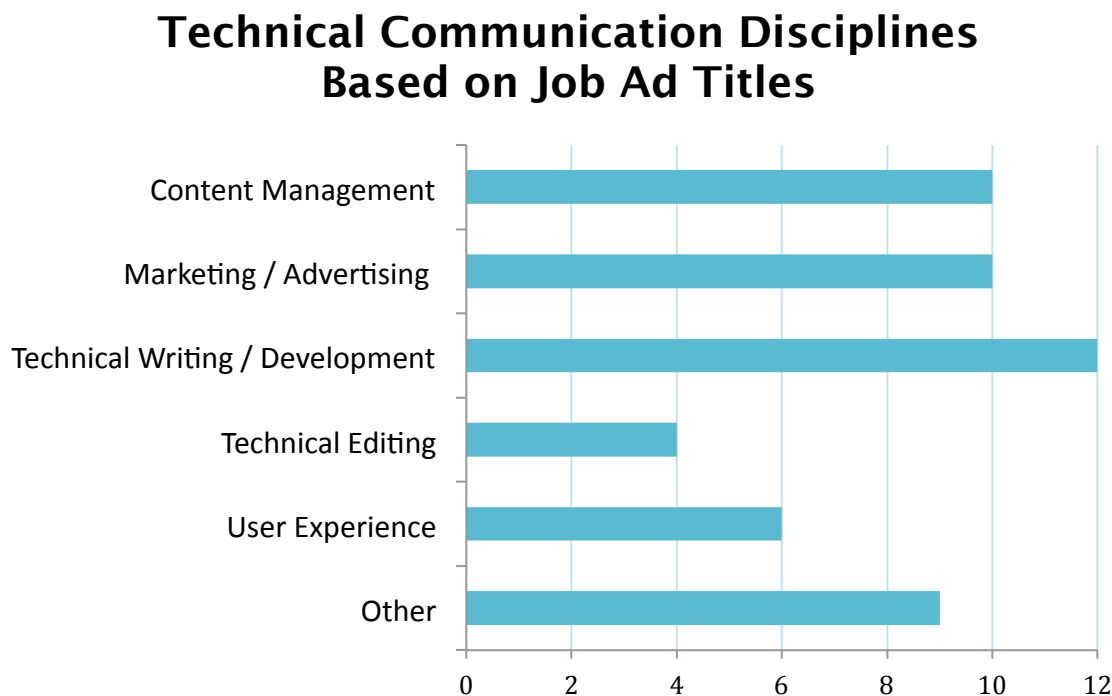
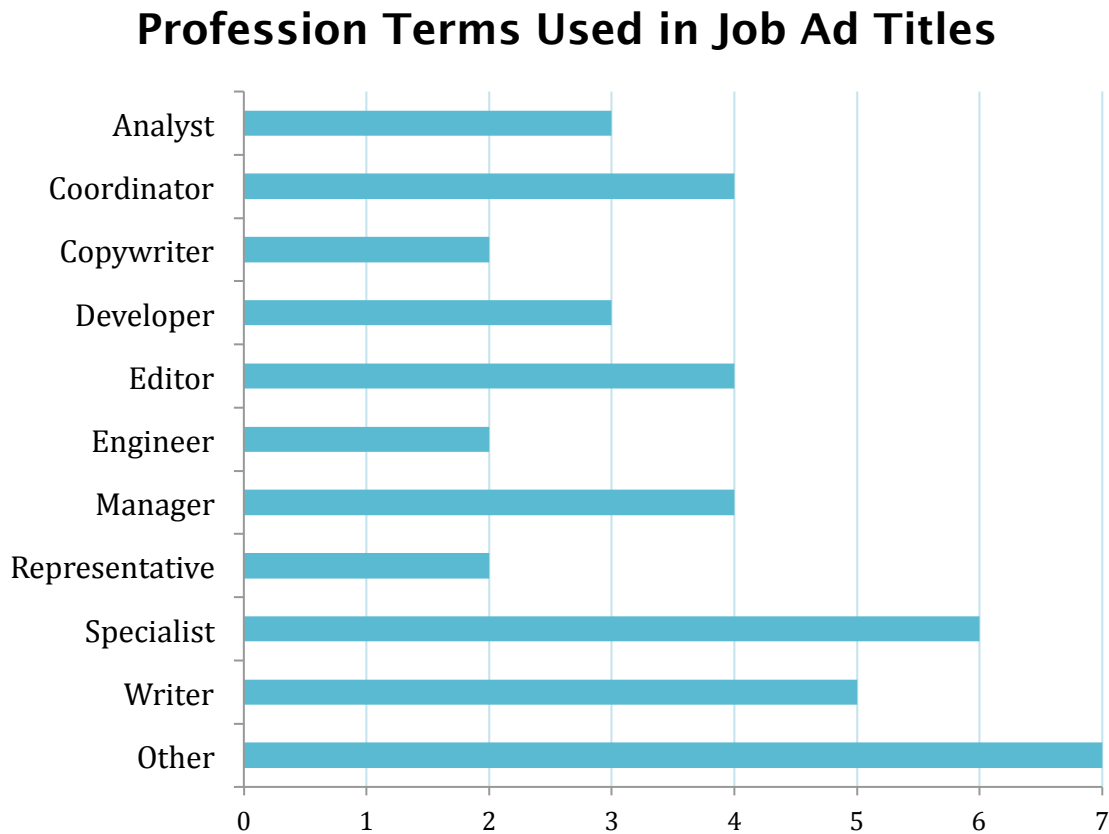


Figure 2: Profession Terms Used in Job Ad Titles



Job Description Analysis

Although the job titles differed, the job descriptions were all similar. Almost all jobs required the creation and management of content (334 hits on the corpus). Many job ads also included the importance of working in teams (247 hits on the corpus).

Other notable duties include

- Focusing on users, customers, and clients
- Creating training and online help services
- Communicating with subject matter experts and development teams
- Developing new tools and ideas

There was little variation in the different fields of technical communication. A technical writer in a marketing field has the same duties as a technical writer in a software development field.

Required Skills Analysis

The job descriptions and duties contained more general information about the tasks of the position. The job skills were a specific set of abilities, tools, experiences, and knowledge a job applicant needed to perform job duties.

The key word used in every job ad in the corpus is “experience” (719 hits). Experience was not only used to describe time working in a related field, but also the level of expertise with a soft skill. “Expertise” only appeared 31 times in job ads. Likewise, knowledge (226 hits) of a tool appeared more frequently than proficiency (31 times) using a tool.

Furthermore, soft skills had more hits and were emphasized more than specific tool skills. Of the 163 instances of “must” in the corpus, 80 were referencing to required skills or experiences. These “must” skills can be sorted to determine which skills employers deemed required for the position:

- 56 were soft skills such as collaboration, management, and written and verbal communication skills
- 13 were tool skills: primarily documentation software and Adobe Suite
- 6 were specified knowledge skills relating to the job’s field
- 5 were years of experience (in a related or specialized field)

However, tools and technology are still requested in job ads. Job posters highly requested Adobe programs (68 hits), Microsoft programs (53 hits), XML skills (49 hits), and HTML skills (47 hits).

Discussion

Compare and Contrast Interview and Corpus Findings

Key Similarities

The biggest similarity between the interviews and the corpus analysis was the emphasis on soft skills. This corresponds to the findings of Rainey and Dayton (2005), who emphasized managers’ evaluation that collaboration, writing skills, and self-evaluation over tools based skills. One difference, however, is that none of the job ads required or mentioned adapting to new technology. This discrepancy is likely due to time. Short-term job positions may not expect employees to adapt to new technology.

Another major similarity is the emphasis on both collaboration and independent work. The discrepancy is the amount of time and emphasis on each variety of work. My hypothesis is job ads are more likely to ask for collaboration skills since this skill is not inherent. (Consider how students groan at the thought of group work.) Further interviews and evaluation need to be made in order to

Key Differences

Aside from no mention of adapting to new technology in the job ads, the biggest difference between the corpus and the interviews is the job titles. Nearly half of the job titles from the corpus were “Technical Writer”; however, none of the people I interviewed identified themselves as “technical writers”. However, I only interviewed a

handful of technical communicators. The issue could be explained by the small sample size. More research needs to be made about the job titles used by technical communicators in industry and the job titles used in job ads.

Another difference is that every technical communicator interviewed mentioned a document-sharing program (Google Docs, Google Drive, and Lotos Notes). However, very few jobs in the corpus mentioned document sharing or specific tools (Google Docs, Google Drive, Git Hub). Corporations may have their own in-house data management tools that are not available outside of industry. This discrepancy warrants further investigation on document sharing and data management.

Reflection

Even in the field of technical communication, it's not what you know; it's who you know. Having a friend or family member in close contact led to a significantly higher confirmation rate than through emailing LinkedIn users. Making connections in the field is an asset beyond just interviews. These connections could even lead to job attainment and success. If conducting this analysis again, I would spend more time looking for people with personal connections to technical communicators than browsing LinkedIn.

Furthermore, the channel used to conduct the interview also affected the results. The face-to-face and phone interviews yielded in-depth discussion of the interview questions and allowed for further questions related to the initial interview questions. Using email hindered the responses. This may be due to the obligation to answer interview questions via face-to-face or phone interviews. Further research would need to be made to further understand email response priority.

The most surprising finding was actually the answers to the question "Does your job ever get in the way of personal or family time?" I did not expect such a definitive "yes". The respondents even said that at times, it was difficult balance family life with work obligations. I assumed technical communication would be a field where I have an "off switch" to prevent work from interfering with family. However, I understand that the move to portable technology combined with the deadline-driven nature of technical communication would blur the line between work duties and personal time.

The amount of different technical communication job titles also surprised me. I fully understand the difficulty technical communicators have branding themselves with a seemingly endless list of job titles. Once I decide which field I want to enter, I plan to research and evaluate job titles and choose the one that is the most understandable people who are not technical communicators.

References

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Appendix A: Interview/Survey Questions

1. What are your most used tools?
2. What is your definition of digital literacy? How does it relate to your job?
3. What is the most important technical skill you possess?
4. How valuable is being able to teach yourself new technical skills?
5. What is the biggest technology change you have faced in your career? How did you adapt to this new technology?
6. Do you spend more time working independently or collaboratively? What are the benefits and challenges of independent and collaborative work in your opinion?
7. Could you work from home if needed?
8. Does your job ever get in the way of personal or family time?