A Qualitative Analysis of the Current Technical Communication Job Market for Technologically Related Positions in Texas

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From across the yawning abyss between academia and industry, one of the major questions which graduate program administrators ask themselves is whether their degree plans prepare their students for entering the industry. Is it possible to curate a selection of courses to teach their students the necessary skills? Many scholars in academia would argue that this is a pointless question—the practical skills can be learned in the field, but graduate degrees are meant for developing a conscious approach to ethics, inclusivity, and research. As a graduate student who always intended to pursue an industry career rather than continuing in academia, I wanted to answer this question more definitively than philosophically. Thus, this study was designed to assess the state of the industry into which I plan to enter. Due to the personal nature of the project, the scope of the study is limited to entry-level technical writing positions in Texas—that is, job postings which I would apply for after graduation one year from now (2026).

Three main questions guided the focus of this study. First, what work is available? The goal for this question is to assess how many positions exist and what their general role is. The Masters in Technical Writing (MATC) program at Texas Tech offers a variety of courses including proposal writing, risk communication, user experience, and HTML publishing. It's possible that some of these courses are more relevant than others. Second, what skills are required or expected? The answer to this question looks at the specific writing skills and software tools which employers expect a new hire to use. Additionally, it may reveal a trend in industry standards that could guide further skill acquisition. Third, what qualifications are required or preferred? In general, the field is (theoretically) open to anyone with a good grasp on writing, but

this question looks more critically at the certifications, licenses, degrees, and experience which employers ask for.

Literature Review

The first entry-point into surveying a field is the name of the role itself. There is plenty of literature available over the goal of technical communication, the scope of the field, and the emergence of the field as a valid career (Cleary, 2022; Durak, 1977; Johnson-Eilola, 1996; Kimball, 2017; Longo, 2000). This research is important for defining the field to academics, but it's more important to know the definitions which employers use. Previous studies over the job market have varied by how many different role names were searched for – anywhere from just one (Stanton, 2017) or two (McCullagh and Cleary, 2025) to up to fifty (Brumberger and Lauer, 2015) titles. Among these studies, there is not a clear distinction found between the roles of technical writer, technical author, or technical communicator. Conversely, these title roles seem to have been found across a wide variety of fields and represent a "wide range" of responsibilities and duties expected (McCullagh and Cleary, 2025, p. 58). The role of a technical writer has pervasive validity and persistent usage, perhaps because of how it "eludes... definition" (McCullagh and Cleary, 2025, p. 41, 59). That much seems to be the case for the field in general, as well (Chase, 2023, p. 409).

With that overlap, there is obviously a range of skills and responsibilities which an employer might expect from a technical writer. Getto et al. (2023) have continuously studied trends across over 5,000 job listings for user experience work and have noticed "roles as user experience (UX) professionals, content strategists, and instructional designers, among others" (p. 230). That same study has also found persistent skills from traditional technical writing like writing skills, communication, and "specialized tools and workflows" (p. 230). Getto et al. note

the variability of skills identified in Lauer and Brumberger's (2015) study, the importance of the job variables—i.e., company, location—in determining skills needed, and the 'soft skills' which are used in most forms of work. Getto et al.'s preliminary conclusion is that, rather than an enormous position requiring a veritable barrage of skills, the subtle differences between titles might actually be a sign that the field is a collection of multiple roles, which each offer their own—smaller!—list of niche skills (p. 236).

Methods

To analyze the current job market, job listings on Indeed were manually selected and qualitatively analyzed. Glassdoor was also searched for listings, but only yielded duplicates of those posted on Indeed. The scope of listings was narrowed significantly by the limitations of relevance. As described above, the positions were filtered by their proximity (within Texas), experience required (entry-level), and title (variations of "technical writer"). Indeed's automatic filter for entry-level positions removed many listings, but the results were also manually filtered for a requirement of 3 years of experience or less. Additionally, since I plan to take a machine-related position, listings were further limited to such. For the sake of this study, "machine-related" is defined as work that revolves around engineering, machinery, and/or computer technology. The difference between positions available at the time of selection and those available next year are unlikely to cause a significant difference in the study results, so that further limitation was accepted. As a result, 22 unique job listings were curated, and their required skills and qualifications were compiled.

Using an Excel spreadsheet, the attributes of the listings were coded and organized. At the time of selection, each listing's role title, employer, and city of basis were recorded. Then, the posted descriptions of the skills, experience, and responsibilities were coded by the following tags: education, field, program/software skills, certifications, writing skills, writing adjectives, genres, soft skills, and experience. Then, coded terms were organized further into sub-categories by phrase. For the sake of analysis, variation phrases were homogenized into a single key word or phrase—for example, "policy, procedure, and systems" was used to reference all instances of documentation of company policies, industry regulations, employee rules, agency decisions, standard operating procedures, best practices, machine operating procedures, computer systems, etc. This simplification may reduce the thoroughness of the study's results but offers a broader assessment of the job market that may be more persistently applicable.

Results

Work Available

Of the twenty-two listings selected, the most common role title was what matched the search terms: thirteen (59%) were listed as "technical writer" or "technical editor." The next most common titles were "documentation writer/coordinator" (14%), "proposal writer" (9%) and some variation of "trainer" (9%). Locations were scattered around all regions of Texas, but clustered more in the major cities as the listed home base. Seven were located in the DFW area, six in Austin, and four in Houston. None of the listings were centered in West Texas, the South border, or the Panhandle. The largest hiring market was in automotive-related businesses (23%), followed by IT consulting (18%) and software development (14%). Three listings were government- or government-contracting positions: two listed as "technical writer," and one listed as "proposal writer."

Skills Expected and Required

The software and program skills expected vary in specificity. The most commonly mentioned software are the Adobe Suite and Microsoft Office Suite, with 20 and 40 mentions

LISTINGS BY ROLE TITLE

13	Technical writer, technical editor
3	Documentation specialist, documentation coordinator
2	Proposal writer
2	Technical trainer, operations trainer
1	Report writer
1	Copywriter-Researcher

Table 1. Listings by role title

LISTINGS BY FIELD

5	Automotive
4	IT consulting
3	Software
2	Construction Contracting
2	Engineering
2	Industrial Manufacturing
1	Business Consulting
1	Energy
1	HVAC
1	Medical

Table 2. Listings by field.

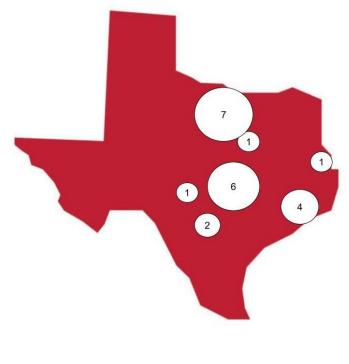


Fig 1. Listings by location

respectively. Some listings only mentioned the general "suite" of programs, while others mentioned specific ones like Adobe Illustrator or MS Word. Aside from these umbrella categories, the other software were rarely mentioned more than twice. Several programming languages were mentioned (7 times), like HTML, Python, SaaS, and SQL, and multiple variations of "content management"/ "collaborative software" were mentioned (8 times). Many skills were referenced generally rather than by specific software, such as "graphic tools" (2 times) in comparison to "CAD/AutoCAD" (3 times), "digital photography"/ "video" (9 times) versus MS Visio (1 time), and "email" (2 times) versus "MS Outlook" (1 time). Overall, the software referenced in the job listings focused on content and resource management, creating/editing documents, and publishing documents.

The writing skills referenced also vary in specificity, with 16 mentions of general "writing skills." The most common references are to research (25 times) mostly through workplace observations (4) and SME interviews (9). The second most common reference is to editing (20 times), revising (10 times), and updating documents (6 times). Mechanical editing tasks are also mentioned, such as proofreading (7) and formatting (5). The typical work of a technical writer to translate complex ideas into more accessible language is, surprisingly, only mentioned 4 times, but the ability to read and interpret technical documents is mentioned 11 times. The expected writing quality is described with 35 different words. The most common of these adjectives is "clear" (11 times), "accurate" (10), "complete" (6), "effective" (5), and "English" (5) (see figure 2).

Of the deliverables described as a role responsibility, the most common category was documentation of policies, procedures, and systems for internal use with 29 references. The next most common was training materials with 27 references, including handbooks and manuals (6),

Writing Skills by Stage of Writing Process						
Pre-Writing	Drafting	Editing/Revision	Publishing			
2 – Analyze/consult	16 – Writing skills	10 – Revise/improve	1 - Distribute			
on document needs						
11 – Read/interpret	12 – Create	20 – Edit	1 – Label, file, and			
documents	documents; generate;	3 – to company	store materials			
1 – instructions	develop; draft	standards				
1 – systems ops		1 – to guidelines				
2 – mechanical		2 – to industry				
drawings		standards				
7 – technical		4 – to style guide				
documents						
25 – Research	4 – Compile;	7 – Proofreading;	7 – Manage content			
2 – business	document	citations; grammar;				
opportunities		punctuation; quality				
1 – industry		checks				
trends/requirements	4 – Translate	4 – Incorporate peer	4 - Publish			
4 – observations	complex information	reviews from				
3 – online/ public		supervisors and				
outreach		coworkers				
9 – verbal SME	2 – Use jargon	5 - Formatting	3 – Train staff; host			
interviews	7 – Co-author;	6 - Update	workshops			
	communicate					

Table 3. Writing skills by stage of writing process



Fig 2. Word cloud: Expected writing quality descriptors

instruction sets (6), assessments (2), workshops (1), and checklists (1). Other genres crossed into marketing materials (4), website and product descriptions (5), user support (3), visual media and charts (14), and project/process documentation (14).

Finally, there were many transferrable 'soft' skills which were included in the job ads. Most listings mentioned collaboration (19 times), interpersonal communication (17 times), and time management/multitasking (16 times). The listings varied widely on who the third-party collaborators were, or with whom would be communicated, but consistently described interdepartmental colleagues as co-authors, supervisors, and/or technical expert references. Several positions described the work as "fast-paced" (4) with the expectation of working on multiple projects at once (7) and managing multiple deadlines (7).

Qualifications

Despite the automatic and manual filtering to ensure that the selection of job ads was entry-level, there was still some variation in what form of experience employers were looking for. Most postings referenced experience in vague terms of "proven" or "prior experience" before describing a field of work. Those which did include numerical values generally asked for at least one year (50%) or two (33%). The field of experience requested was split evenly between technical writing work (42%) and specific position-related work (42%) as well as any unspecified "related experience" (16%). Several postings requested experience with both writing and scientific matters.

Educational qualifications were less varied than other aspects of the job postings. Of the ten mentions of education, six preferred a bachelor's degree (60%), three asked for an associate or other undergraduate degree (30%), and one only required a high school diploma or GED (10%). Those degrees were associated with 34 potential fields of study that ranged across liberal

arts (53%), the sciences (15%), education (12%), and any other "related field of study" (15%). Very few certifications were mentioned at all, totaling only 7 references that included a technical/scientific program certificate, background check, drug screening, aptitude assessment, secret clearance, and a driver's license mentioned twice. A driver's license was *implied* in up to 5 postings, though, which listed the responsibility of travelling intermittently to operational locations.

Discussion

The most interesting part of the study is the lack of request for a master's degree. It is a disappointing conclusion that employers do not *need* the degree which I am working toward; however, this does not mean that an MA in technical communication is unnecessary or worthless. Halfway through this degree, I feel qualified to apply for any of the jobs advertised. Many of the skills listed align with my coursework from the past year. For example, in ENGL 5373: Instructional Design for Technical Communicators, the course required a semester-long project which involved verbal interviews with SMEs, UX testing, and use of learning management systems (LMSes) to coordinate instructional materials. ENGL 5376: Online Publishing was a crash-course in front-end coding, including HTML and an introduction to content management systems (CMSes). In terms of hard skills which employers know to ask for, the 'practical' courses in my degree make me a qualified candidate.

Less measurable are the writing skills and soft skills that these listings included. These may not be taught directly at the graduate level, but the two years of intense coursework offer a chance to practice the skills which an undergraduate simply acquires. For example, research skills are referenced in the job postings more than any other writing skill; each class project I complete requires self-guided heavy lifting in this area. In response, I've been pushed to learn to

use a new software program (Zotero) for managing reference sources, join a writing group to work on time management and writing strategies, and learn to communicate obstacles to completion more professionally. Additionally, a graduate degree differs from an undergraduate one in the diversity of classmates. With cultural and age gaps between my peers and myself, interpersonal communication requires much more consideration to the audience, especially when attempting to interpret and communicate the complex ideas presented in each week's theoretical readings.

The goal of this study was to not only justify my academics to myself and potential future employers, or even to identify any shortcomings in the TTU MATC degree plan, but to determine what skills I need to use the next year to acquire and/or improve on. With the breadth of capabilities that was found in this (*very* exclusive) data set, I believe that there are two options for moving forward: a.) diversify my courses to pick up a little bit of everything, and develop each new skill on my own post-graduation, or b.) identify the most preferable work position(s) which I aim to hold and focus specifically on developing skills pertaining to that/those position(s). Either way, my 'practitioner's takeaway' is to continue learning, and to let experience come through practicing.

References

- Brumberger, E. and Lauer, C. (2015). *The evolution of technical communication: An analysis of industry job postings*. Technical Communication, *62*(4), pp. 224–243.

 https://www.stc.org/techcomm/wp-content/uploads/sites/3/2016/08/TechComm2015Q4 Web.pdf
- Chase, J. (2023). Keywords in Technical and Professional Communication (Yu, H. and Buehl, J., Eds.) [Book Review]. IEEE Transactions on Professional Communication, 66(4), pp. 407-409. https://ieeexplore.ieee.org/document/10330551/
- Cleary, Y. (2022). *The Profession and Practice of Technical Communication*. Routledge, ISBN: 9781003095255.
- Cosgrove, S. J. (2023). Finding the Gap: A comparison of UX industry practices and UX course outcomes in TPC programs. IEEE Transactions on Professional Communication, 66(4), pp. 356-365. https://doi.org/10.1109/TPC.2023.3314300
- Durak, K. (1977). *Gender, Technology, and the History of Technical Communication*. Technical Communication Quarterly, *6*(3), 249-260. https://doi.org/10.1207/s15427625tcq0603_2
- Getto, G., Labriola, J. T., and Lancaster, A. (2023). *The State of UX in Technical and Professional Communication: Courses, Programs, and Jobs.* IEEE Transactions on Professional Communication, 66(4), pp. 317-321.

 https://doi.org/10.1109/TPC.2023.3314255
- Getto, G., Vance, B., Flanagan, S., and Jacobsen, K. (2023). *Emerging UX Skill Sets: Preliminary* findings from a textual analysis of job ads. IEEE International Professional

 Communication Conference. https://doi.org/10.1109/ProComm57838.2023.00054

- Johnson-Eilola, J. (1996). Relocating the Value of Work: Technical communication in a post-industrial age. Technical Communication Quarterly, 5(3), pp. 245-270.
- Kimball, M. (2017). *The Golden Age of Technical Communication*. Journal of Technical Writing and Communication, 47(3), pp. 330-358, DOI: https://doi.org/10.1177/0047281616641927
- Longo, B. (2000). Spurious Coin: A history of science, management, and technical writing. State
 University of New York Press. ISBN: 0791445569
- McCullagh, M. and Cleary, Y. (2025). What is in a Name? An analysis of UK online technical communication advertisements. IEEE Transactions on Professional Communication, 68(1), pp. 41-60. https://doi.org/10.1109/TPC.2025.3528716
- Moeggenberg, Z. (2022). Job Market Mentoring in Rhetoric and Composition and Technical Communication. Rhetoric Review, 41(4), pp. 297-315.

 https://doi.org/10.1080/07350198.2022.2109398
- Stanton, R. (2017). Do technical/professional writing (TPW) programs offer what students need for their start in the workplace? A comparison of requirements in program curricula and job ads in the industry. Technical Communication, 63(3), pp. 223-236.