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Theory to Practice: Negotiating Expertise for New Technical Communicators

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ABSTRACT

In technical communication, discussions on how to best prepare graduates to meet workplace challenges range from responding to changing technology and occupational needs to focusing on creating flexible workers. Part of this conversation centers on expertise: what kinds of expertise are most valued and how can graduates be trained to be experts? In this article, we explore our field's understandings of expertise by focusing on a recent master's graduate and practitioner, Megan. As first an intern then a full-time employee at HP Inc, Megan experienced clashes between the classroom and workplace, which she sought to reconcile. In addition, she also had to learn to assert herself as a subject matter expert (SME) while working alongside SMEs. This navigation was not something her education necessarily prepared her for, and when compared to surveyed graduates' experiences, may be something programs could emphasize. We conclude with recommendations for how academic programs can incorporate conversations about expertise and equip students to assert themselves as communication SMEs and build on that expertise after graduation.

Categories and Subject Descriptors

H.0 Information Systems: General

General Terms

Documentation, Design

Keywords

expertise, academic training, subject matter expert, workplace preparation, knowledge transfer, professional development

INTRODUCTION

The dynamic nature of technical communication has long led practitioners and researchers to examine communicators' roles within organizations and consider what elements lead to their success. For instance, in line with Johnson-Eilola's (1996) call to reconceive technical communication as symbolic-analytic work, scholars have examined what key skills are needed (Kimball, 2015), how professionals and subject matter experts value contributions (Dubinsky, 2015; Rice-Bailey, 2016), and how universities should expand their approaches to meet the needs of professionals (Brumberger & Lauer, 2015). In addition, technical communication has expanded beyond documentation into user experience (Brumberger & Lauer, 2016), game development (deWinter & Vie, 2016), social media (Ferro & Zachry, 2014; Pigg, 2014), video communication, app development, and other areas made possible by emerging technologies.

Within all of these developments and new directions, however, several questions emerge: what is the place of technical communication as a field in relation to other disciplines? What can technical communicators do to remain relevant and marketable in a rapidly-changing professional landscape? What should academic programs do to ensure their graduates possess the skills that will lead to success in the field? Scholars have taken up these questions in a variety of ways. For instance, in thinking about how best to prepare technical communication professionals, scholars and practitioners have focused on assessing what managers require (Dubinsky, 2015; Kimball, 2015), what abilities set communicators apart (Brumberger & Lauer, 2015), and what skills are in demand and what communicators should do to be most marketable (Brumberger & Lauer, 2015; Whiteside, 2003). What these approaches all have in common is a response to industry demands: each focuses on how graduates should choose a focus or develop a set of skills desirable to employers. While this responsiveness is useful for graduates pursuing available positions, the emphasis on specific skills may reinforce the idea that technical communication is always in service to something else, rather than an area of expertise in its own right.

Pushing against this conception of technical communication, other scholars focus on how education and training provide technical communicators the expertise to pursue positions in high-demand, lucrative areas, as well as how communicators can be integral to an organization's success. For instance, Brumberger and Lauer (2016) argue that technical communication competencies overlap with user experience (UX) positions and that technical communicators can and should be involved in that growing field. In addition, Redish (2002) provides strategies technical communicators can use to demonstrate how they add to an organization's bottom line, a strategy Bloch (2011) advocates as a method to increase a communicator's perceived status. Rather than simply responding to the shifting demands of industry and emerging technologies, these authors emphasize the way that technical communication as a body of knowledge and a profession brings valuable skills and expertise to an organization.

Tensions over clashing values between fields as well as anxiety about expertise and expert status permeate these discussions. Despite the complex reality of their work assignments and the dynamic role they can play, technical communicators are often still confined to the box of documentation-ist, rather than the more elevated status of subject matter expert (SME) in the various subjects in which they work. Johnson-Eilola (1996) explains how technical communication is often seen as a field in service to other professions or in a supporting role and thus placed at a lower value. Kimball (2015) also comments that technical communicators are limited to roles as scribes or "a matter of *writing down* things other people say, rather than of being involved in more strategic decisions about product development" (p. 140, emphasis in original). These ingrained descriptions of technical communicators' work undercut their expertise, expertise that individuals must make clear to peers and coworkers daily.

Some of these tensions emerge from misunderstandings of what technical communication is as a field and the work communicators can engage in. Because practitioners can work in positions as varied as design, editing, content development, medical writing, and user experience, defining technical communication is not always straightforward, even for the individuals working in those areas. Rice-Bailey (2016) observes that the difficulty defining the field creates challenges "for many TCs to fully expound upon their roles and the competencies they bring to the workplace. Some employers do not know exactly what a TC does, and in fact, sometimes TCs themselves cannot articulate their role and the value they provide" (p. 231). She also argues that in order to succeed, technical communicators "must continually explain their value to coworkers and bosses and must begin to represent themselves and their work as dynamic" (Rice-Bailey, 2016, p. 232), something communicators are frequently unable to do.

In this article, we explore these issues of training, value, and expertise within a specific academic context and focus on Megan's (one of the co-authors) experiences as a technical communicator at HP Inc. Specifically, we examine how Megan's graduate education and her job as an information developer each prepared her in distinct ways to negotiate and define her expert status within a large organization. We argue that in light of Megan's need to assert her expertise, technical communicators must be prepared to not only demonstrate their knowledge and skills within an organization, but also argue for themselves as communication subject matter experts.

While specific skills may vary widely for each individual, technical communication expertise typically includes knowledge about context-specific language, audience and situation, editing strategies, and experience with technology for completing writing and design tasks. For a professional technical communicator, expertise requires fusing knowledge about effective writing and design with rhetorical knowledge. Rhetorical knowledge involves an assessment of stakeholders and situational context to make decisions on how best to meet their needs. Schriver (2012) examines the key features of expertise in technical communication, concluding that it entails skills such as assessing rhetorical situations, applying knowledge about communication to accomplish goals, knowing when and how to seek out new knowledge, understanding how work will circulate, and navigating complex organizational structures (pp. 304-305). Expertise involves "the development of sophisticated general knowledge about writing and visual design as well as extensive domain-specific local knowledge for carrying out writing and design activity" (p. 280). In other words, expertise entails both communication subject-matter knowledge and specific localized knowledge about an organization and the unique rhetorical situations members of that organization engage in.

Traditionally, subject matter experts have been defined in relation to technical communicators. For instance, an engineer in an organization would be positioned as an SME with their technical education, experience, and knowledge, while the technical communicator might be characterized as not having that technical expertise, at least to the same degree as an SME. Thus, the communicator is typically not viewed as an SME. This binary is addressed in some academic programs, where technical communication students are required to take a graduate class in the subject related to their internship, thus gaining subject-matter expertise that helps them collaborate with coworkers more successfully (see Bloch, 2011). The binary is also visible in how some communicators are treated if they are perceived as lacking knowledge in the content area, either by being ignored or feeling that they lack status (Bloch, 2011, pp. 316-17).

Another characteristic of the perceived binary is that any knowledge and experience communicators possess in a specific field would have been developed through interactions with SMEs. For instance, Rice-Bailey (2016) characterizes the interactions between SMEs and communicators as viewed in terms of transmission or translation, where "[t]he SME is depicted as the 'owner' of the information and the TC as 'massager' of that information" (p. 237). Furthermore, the communicators in her study were conscious of the need to avoid characterizing their work as translation, but they tended to do so anyway (Rice-Bailey, 2016). Meanwhile, SMEs expected the communicators to assert their value, lest they "be seen as a nuisance to the SMEs, unnecessary to the product development and implementation process, or simply expendable 'overhead' to the department and organization" (Rice-Bailey, 2016, p. 240). Thus, communicators develop their content knowledge in various technical areas as one strategy to be taken seriously by the SMEs they collaborate with (Bloch, 2011), but they may not characterize their own knowledge as subject-matter expertise.

This traditional view of the SME/technical communicator binary is occasionally disrupted by arguments that communicators themselves are subject matter experts and leaders. For instance, Bekin and Williams (2006) base their arguments on the understanding that technical communicators are themselves SMEs in the areas of communication. They define the SME's categorical skills as

solution focused, emerging from "personal knowledge" or "personal expertise" developing products and processes to solve problems (Bekin & Williams, 2006, p. 290), a definition that embraces communicators as SMEs. So while technical communicators are sometimes characterized in technical communication scholarship as SMEs, they are less likely to be viewed as such in the organizations they work in. In addition, their value as an SME is not always apparent to their coworkers or supervisors.

Using Megan's experiences as a case study, we explore how a recent graduate from a technical communication master's program working in a large corporation is learning to negotiate her expertise and subject-matter expert status. We first examine how her graduate education positioned communicators in relation to SMEs both implicitly and explicitly, and how she then came to understand those relationships as more complex and potentially less hierarchical. We next discuss how the clashes between her education and experience might inform the ways programs approach the concept of expertise. We conclude with a discussion of how programs can work toward supporting their students in asserting their value and expertise.

PRACTITIONER CASE STUDY

Megan's experience in the Master of Arts in Technical Communication (MATC) program at Boise State University serves as a case study to highlight gaps in her education in two crucial areas: asserting value within an organization and advocating for SME status. During her time in the MATC program, Megan noticed in student discussions a commonly circulated theme: that communicators frequently served their peers in organizations, responding to the needs of SMEs just as frequently as writing for the needs of users. Despite professor assurances that the skills learned in the program were valued in the workplace, students rarely articulated ownership of their expertise in class and online discussions. These student perceptions and, in some instances, course reading materials, positioned the technical communicator as a translator between the SME and the end user of a document. In this dynamic, the original source of the knowledge (the SME) holds the most power in determining what content is "right" and how it should be said—areas that are a technical communicator's specialization. Finally, classroom conversations implied that technical communicators are responsible for effectively working with SMEs as teammates, meaning communicators often held the responsibility for maintaining collaborative relationships and offering criticism in a way that would not disrupt that relationship. Meanwhile, communicators must simultaneously reinforce their own expertise as an authority in communication style, writing, and rhetorical understanding of one's deliverable, audience, and purpose.

Megan entered the MATC program in Fall 2015 and graduated in May 2017, a time when the program was undergoing faculty and curriculum changes. While Boise State has offered a master's degree and a graduate certificate for over 20 years, the program had grown outdated. In recognition of the changing nature of technical communication and the dynamic needs of the individuals enrolling, curriculum revisions were implemented in Fall 2016. The program updated courses to emphasize a rhetorical approach and to focus on theories of usability, social media, and other areas not previously covered in the program. These changes mirror the larger trends in technical communication as academic programs strive to balance skills-based approaches (and the demands for those areas) with more flexible, rhetorically-based curricula (Bekins & Williams, 2006; Brumberger & Lauer, 2015; Kimball, 2015).

As a graduate student, Megan took core classes in rhetorical theory, technical rhetoric, and editing, as well as information design, user experience, and a number of electives, such as print and online document design, publication management, and software documentation. During her studies, Megan also worked as a Customer Education intern at HP Inc. Over her nearly two years as an intern, Megan contributed to a variety of projects including content management, copywriting, and creating print and online setup instructions. When she graduated, Megan was promoted and transitioned to full-time work; her job scope includes creating printed, online, and app-based user instruction materials and researching trends in product instruction.

Clashes in Education and Experience

Because she worked in the field and went to school simultaneously, Megan was able to immediately apply or compare discussions and content from the MATC program to her job. Her work experiences did not always align with class discussions, particularly relating to the relationship between technical communicators and subject matter experts and how to advocate for the value of her team's work. While it is impossible—and inadvisable—for an academic program to attempt to replicate a workplace environment, some of these clashes are ones that can be directly addressed through assignments, readings, and course discussions. For instance, Megan found that technical communication courses were generally pro-writer spaces, where everyone agreed that communication work is beneficial to an organization and worth investing in. In the classroom, the student may not need to address many stakeholders with different opinions, whether on their work in particular or communication in general; "readers" (peers and teachers) are receptive to a student's approach, and success is often determined by effort on an assignment.

In the workplace, however, a communicator has to account for a variety of stakeholders with differing opinions about the best course of action, and the communicator's success is part of a larger organization's success. For instance, while Megan feels supported by program teams at HP, she has also found that budget, timeline, and resources become equal considerations to an ideal user experience. In the classroom, students are largely responsible for the constraints on their work. An example of this would be the amount of time a student dedicates to an assignment or the number of self-reviews before submitting their work. These are self-imposed constraints, whereas in the workplace, constraints are often out of a writer's direct control. Even when assignments attempted to replicate a workplace situation or emerged from a student's current employment, the moving pieces of the workplace were not always accurately discussed or represented. In the workplace, outside factors have a much stronger influence on a project's timeline, style, and budget. The quality of the final product is not the sole outcome. In this environment, Megan discovered that as a communicator, she must argue for her personal expertise, the time it takes to deliver quality work, and the necessary business investment. The classroom and workplace are two distinct rhetorical situations, and those distinctions present challenges in preparing graduates to enter organizations as practitioners.

The workplace rhetorical situation also impacted Megan's work with SMEs and the way she has come to view herself as a subject matter expert. Megan found that during her master's degree, SMEs were often painted as authorities who approached a technical communicator knowing exactly what they needed, providing the necessary information. Classroom discussions frequently referenced writers receiving information or waiting for SMEs to

provide information when their work was needed. This language—"receiving" and "waiting"—subconsciously places the writer as an assistant in the creation of knowledge rather than a partner or leader, a position technical communication scholars recognize as problematic (Johnson, 1997; Johnson-Eilola, 1996). In classroom discussions, student comments implied this power imbalance was common, and it generally permeated conversations about SMEs. When students explained how they interact with SMEs, they often described reaching out to SMEs to answer a question or waiting for an SME to provide the necessary information or draft to start their own work. Rarely did students talk about conducting research alongside an SME, interacting with prototypes, running usability tests, or talking directly with users. It was as though a gatekeeper always existed between the technical communicator and the information needed to do their job, hindering the potential for them to ever be on equal footing. Thus, graduate students' interactions with SMEs did not seem to align with the empowered idea that professors reinforced in lectures—that technical communicators are essential for organizations wanting to instruct or communicate with users in the best way. In theory, technical communicators are valued at the same level as SMEs. However, based on the discussions Megan participated in around the topic, technical communicators are still responding to SME needs rather than acting as a partner in leading communication.

Faculty members were conscious of the distinctions between classroom and workplace rhetorical situations and worked to provide a rhetorically-based education in their courses. However, the materials or approaches in their classes may have presented or implied a different message about the relationships between communicators and SMEs. For instance, in the program's required technical editing course, the relationship between author and editor was sometimes positioned as the author with subject-matter knowledge and the editor without. Even the presentation of levels of editing—proofreading, copyediting, and comprehensive editing—sets up the editor generally as someone who fixes errors but doesn't address writing unless meaning is unclear. The levels of editing and the SME knowledge needed for a comprehensive edit can be particularly hard to explain to new technical communicators, who have been perhaps editing for their peers in classrooms, for family and friends, or for community events long before they entered the program.

Additionally, in the textbook Megan used in the editing course that Jennifer taught, a chapter is devoted to teaching editors and technical communicators how to interact with writers and SMEs when editing their work (Amare, Nowlin, & Weber, 2011). Reading the chapter again a year later, Megan noticed that the primary message of the instruction is not just how to get along with SME authors, but also how not to offend their SME status, which framed conversations about how to work with authors in the course. In fact, when Jennifer taught this course, she did not consider the implications of positioning editors and writers in this dynamic. She and the students in the course spent a lot of time talking about how to offer feedback without appearing to take over the writing or not offending the writer. Although outlining ways to positively influence other people's writing is valuable, this approach implies that editors are responsible for protecting authors or SMEs from valid comments they don't want to hear, rather than SMEs being responsible for receiving and addressing editorial feedback. In the textbook and the class, editors were instructed in tactics like hedging, downgrading direct statements, and suggesting and asking questions instead of telling (Amare, Nowlin, & Weber, 2011). Taken as a whole, these suggestions imply that editors should prod SMEs in the correct direction for them to discover in their own time, rather than technical communicators asserting their own knowledge outright.

Furthermore, graduate students may struggle to present themselves as experts, even when encouraged to do so. As the developer and instructor for two introductory courses in the program, Jennifer has noticed that when asked to discuss their expertise, students often fall back on their student status rather than making compelling arguments about their work and educational experiences, despite having a variety of skills and workplace training. In fact, several students expressed discomfort with making strong claims about their abilities, even when they were able to do so successfully. Classifying oneself as a student or entry-level technical communicator preemptively (and maybe subconsciously) sets up a ready-made excuse for any lack of knowledge or experience that an SME or partner might perceive in a writer. New technical communicators or students in particular might be hesitant to claim their own status as an expert because of the reinforced ideology that a technical communicator relies on an SME to do their own work. For instance, in Bloch's (2011) study, she found that many communication interns struggled to get SMEs to cooperate with them and sometimes felt undervalued. In terms of being subject matter experts, technical communicators were often still shunned as not being experts in the specific subject they communicate or write about, particularly the sciences. In response, Bloch (2011) describes how many technical communication interns took the time to attain knowledge of their own, committing themselves to learning about the subject at hand. Learning on the job in this manner is reflective of the instruction given to MATC students, like Megan, but does not in and of itself enable communicators to assert their own expertise.

During her time in the program, Megan repeatedly heard from professors that the goal of the program was to create flexible, adaptable communicators who could apply their learned skills in many different fields. As an adaptable communicator, students should leave the program able to create content and contribute to a positive user experience in any subject matter, once they familiarize themselves with the audience and needs of an organization. However, does this lack of specialization actually hurt students' chances to be successful SMEs or to be taken seriously by SME peers? When communicators describe their jobs or skillset in terms of being flexible and adaptable, will future coworkers see that as a detriment? The traditional idea of a subject matter expert is based in specialization, so the route by which technical communicators might approach SME status must be negotiated against coworker expectations, potentially academically-ingrained.

Working with SMEs as an SME

Through her internship and work experience, Megan has realized her own identity as an SME consists of both technical communication expertise, learned from her academic training, and product and organizational knowledge, learned directly from her job. In other words, her understanding of her own expertise is in line with Schriver's (2012) outlining of expertise as incorporating both local rhetorical knowledge and subject-matter knowledge. As a technical communicator, Megan is currently responsible for being both a writer and an SME for a wide range of topics. As a writer, she contributes to her team's style guide, specializes in wordless instruction, and consults on copywriting tasks. As an SME,

Megan is an expert resource for how different consumer printers function from a user's perspective; writing user guides and setup instructions necessitates consulting with designers and engineers, but the majority of the knowledge to write these documents comes from investigating prototypes herself. By interacting directly with products, Megan builds her own subject-matter knowledge on how the products operate, how to troubleshoot errors, and how to best convey this information to the appropriate audience. Her product knowledge and research is a prime example of how Megan and other members of her team are not only responsible for the final deliverable, but also for gaining the necessary knowledge themselves to communicate it to others. She leads the investigation into the requests she receives, gathering information along the way and creating deliverables that meet the needs of partners and users.

In her own work, Megan not only assumes an SME identity, but also feels she is given more status as an SME by her teammates than much of the research presents for the field as a whole (Bloch, 2011; Dubinsky, 2015; Rice-Bailey, 2016). However, her coworkers might still have trouble defining what her subject-matter expertise entails. Many teammates might not recognize technical communication as the appropriate title for Megan's relied upon skills, particularly because she works as a shared resource, creating deliverables for multiple teams, with different needs. For one group, Megan primarily writes copy and edits materials written by SMEs. For another, Megan works more intimately with products themselves and designs instructions that must be tested, translated, and formatted before final publication. The team using Megan primarily as an editor has no idea the depth of work she is capable of and provides to other groups. For instance, Megan was recently working as a copywriter for a mobile app, writing text for modals and app screens. The lead app designer was not aware of her training in instructional design until it was mentioned by a coworker who worked with Megan on a different team, where she was providing more robust technical communication expertise. Afterward, the app team began to utilize Megan for much more than copywriting; she now also contributes to planning the best ways to instruct users in the app and how to design modal messages that are less interruptive to users. The additional instructional design and research expand beyond only writing copy. This example highlights how even "copywriter" or "technical writer" can be confining as a title and may ignore the more expansive research and instructional education many technical communicators have. This specific group assumed copywriting was her only contribution to their project, and even Megan failed to convey that she could contribute more than that.

Part of the lack of clarity around her subject-matter expertise is connected to team and individual titles at HP and the transformations these titles undergo in a large organization. In crafting Megan and her team's professional identity, naming and title have an impact in describing the span of work her team and the individuals on it deliver. Her immediate team of technical communicators has undergone three name changes: originally, it was the Learning Products team, then Customer Education, and now the Guidance, Education, and Voice Experiences group. When working with a new partner, Megan has found that introducing her team's name does little to clarify her team's work because the partner may have used the team's skills under previous titles. Organizational restructuring and rebranding can impact an individual contributor's professional identity in the same way their personal job title might. To inform SMEs of her skills and what she can offer as a partner on their projects, Megan has found it helps to provide details on her team's contribution to the organization and examples of the work she can deliver.

Thus, despite the various titles and team names she has worked under, Megan actively contributes to the formation of knowledge in partnership with an SME. In Megan's experience, SMEs primarily come to a technical writer to begin the investigation into their request, rather than to only sum up the findings. For a given project, she frequently receives the initial request for a final deliverable, such as "We need text to explain to users why they should use this new service," without all the information for completing that work. A request like this requires teamwork with various coworkers and partners to complete it successfully, and Megan helps to drive the investigation to deliver her materials. In her work, Megan does not just receive information from SMEs to document, as expected based on classroom discussions; instead, she actively creates knowledge by investigating each request and combining that information into the best user experience possible. Her interactions with SMEs focus on asking questions to draw out the information she believes she will need. In most instances, Megan uses research and writing skills to participate in a co-creation of knowledge that affects her interactions with SMEs.

This questioning Megan describes requires a detailed understanding of the SME's goals for a specific document or web screen, often with the SME discovering these goals or fleshing them out for the first time as Megan and an SME talk through the request together. Her experiences with SMEs are directly based in rhetorical analysis, something the MATC program emphasized—knowing one's audience and the potential limitations or confines of a deliverable or genre. In addition to rhetorical analysis, she has acquired knowledge on the job of what questions to ask SMEs to gather the needed information. The investigation places her in the driver's seat for creating knowledge, not just documenting prescribed information. Megan recognizes that this dynamic between SME and writer is different from how the MATC program sometimes framed the relationship, where the exchange may be viewed as more transactional than additive. The presentation of the SME-communicator relationship within the MATC program coursework may unintentionally reinscribe the power hierarchy—where communicators are viewed as support or secondary. As Megan has found in her organization, technical communicators are just as much investigators as they are the resource for summarizing final findings. With these expanded roles, Megan realized that as a technical communicator, she needed to argue for recognition as a subject matter expert.

Additionally, her educational training did not address instances when an SME might not agree with a technical communicator's recommendation or foregoes suggested revisions, effectively undermining the writer's expertise. "Passing" on a writer's recommendations places the writer in a place of inferiority, sometimes without the organizational hierarchy to push back against the decision. As an example, Megan worked on editing a number of marketing pitches that had tested poorly in user understanding. In testing, users had expressed confusion and weren't able to correctly describe the promotions in their own words. Despite her push to advocate for user understanding over catchy phraseology, the marketing team bypassed these suggestions and went with the original copy. When SMEs pass on suggestions, Megan is most troubled that the stakeholder's decision can make her team question

Megan's authority on particular content. After this example in particular, she received many inquiries of "But don't you own this content?" and "Can't you just decide?" from teammates surprised by who ultimately had the final say on the copy. In some instances, no matter how a technical communicator works to build up credibility and SME status, product owners and SMEs can quickly override a recommendation. Although frustrating, Megan recognizes that the most she can do in these instances is assert her reasons for revisions, reference any available data, and state that she isn't aligned with the decision as a way to continue to assert her expertise.

Arguing for Expertise

While understanding herself as an SME has enabled Megan and her coworkers to understand her role, she also has to argue what her expertise entails. As discussed above, Megan understands that shifting titles can sometimes obscure the roles and skills a communicator brings to a project, meaning that asserting expertise is crucial. Depending on the organization and team, technical communicators can have varied job titles while specializing in similar work. These job titles are likely not intuitive to people outside the field and do little to reveal the work taking place. This lack of understanding regarding the work of technical communicators could result in SMEs or other partners dismissing technical communication work as unimportant since it is not easily described and universally understood (as compared to say, electrical engineer, project manager, industrial designer, etc.). It is up to individual technical communicators to continually educate their coworkers on the contributions they can make to a given project, what is within their scope of expertise, and what type of adaptable skills they can develop further to contribute at a higher level to various projects—in other words, assert themselves as an SME in their field. Megan didn't feel this reality was discussed in her graduate program to a full extent. To be seen as an SME, Megan makes sure that her teammates understand the work she can contribute (having developed and practiced a clear description of her skills and job), that she completes all her work on time, and that she utilizes opportunities to advance her technical communication and business skills when possible.

Thus, Megan combines her academic education with workplace learning to confront misconceptions of what her job is and to argue for the value she adds to an organization.

Megan has found that if she follows her practices and completes her job assignments well, that value will be recognized. For technical communication as a field, achieving recognition can involve many power dynamics—age, gender, experience levels, institutional hierarchies—but in addition, it may entail overcoming the deeply held assumptions by many non-writers that "anyone can write." Recently in a conversation about a new style guide, Megan felt supported by a teammate when he commented that the first rule in the guide should be "Use a writer for all writing," an outlook that others may fail to embrace. Although the concept of using an expert for their expertise seems obvious, technical communicators may have to reinforce their necessity and value in spaces where writing may be seen as less essential or rendered invisible within a larger project.

Subsequently, Megan has found that because technical communication is relatively new as an academic field, many teammates who do similar work do not have the same academic backgrounds. This can cause many communicators to rely on job experience rather than education, in line with Schriver's (2012) observation that expertise is often conflated with years on the job. In actuality, work experience may not lead to expertise, particularly if a worker uses the same approaches and does not strive to develop additional skills (Schriver, 2012, p. 288). Megan has found that many employees begin their careers as technical writers and eventually transition into project management, people management, or a different business segment. Because of the varied academic backgrounds, many employees rely primarily on their product knowledge and on-the-job experience, rather than educational training—or their educational training no longer applies to their current position. Because Megan possesses academic expertise in what she does every day, she sometimes experiences pushback against academic theory in day-to-day application. She often has to balance sharing ideas and best practices learned in her graduate work and not coming across as disrespecting product knowledge or the systems in place. In these situations, she has to negotiate for her solutions with coworkers who do not possess communication expertise but who have been working at HP for longer than she has and who approach problems based on their experiences rather than training in communication. Megan has also had to argue for her expertise with those who knew her first as an intern and might still see her in that light. Because of the potential tensions between academic theory and workplace realities, Megan had to adapt her educational training to her place of work, while aiming to remain true to the foundations of excellent communication, thus asserting her expertise.

DISCUSSION AND IMPLICATIONS

As Megan's experiences indicate, the challenges for technical communication professionals are often less about specific skills and more about fitting into organizations, asserting expert status and value to clients, and interacting with SMEs and other departments successfully. Inevitably, discussions in a technical communication classroom will not be able to address the vast variation in the workplaces graduates may enter. However, technical communication programs can arm their students with practical skills for negotiating expertise on the job and better prepare students to make connections between their academic training and work situations, even if the two do not perfectly align. While Megan saw students who wanted specific skills, she realized that the aspects of the MATC program that helped her be successful were the ways faculty and course assignments worked to orient and train students to continue learning how to be technical communicators throughout their entire careers, adapting to varied rhetorical situations.

Asserting Expertise in SME Interactions

Like many students in Boise State's technical communication program, Megan worked while attending graduate school; this duality in her life as a technical communicator (writer by day, student by night) made her aware of the differences between her day job and her night classes when they would arise. In these observations, Megan also focused in on the stories of her peers, particularly relating to SMEs. To better understand the experiences of other MATC program graduates, we surveyed 13 MATC program graduates, 12 of whom graduated after December 2015, about their interactions with SMEs as well as their own status as experts [1]. While this survey is small (13 respondents recruited from one academic program), the results provide another perspective and background to Megan's experiences in working with SMEs and being perceived as experts.

In the survey, we asked respondents if they consider themselves subject matter experts. Responses were mixed: five said yes, while three replied maybe and three replied no. In this case, slightly over half of the respondents were hesitant to claim their own SME status or outright rejected that identity. While the sample is small and limited to one program, this finding is in line with studies about value and expertise (Rice-Bailey, 2016). As a follow-up question, we asked respondents to elaborate on their own SME status. For those who did not see themselves as SMEs, reasons often related to how they were perceived by others in their organization or their level of power:

- I do not have a lot of authority to change content
- I consider myself an expert in marketing and technical communication and am extremely knowledge[able] about several of the departments I serve. I'm not sure that my coworkers (i.e. the department representatives) consider me an expert in their area or even in my field. I tend to get reasonable respect for my work but [SMEs] have very strong opinions about their subjects.

For those who did see themselves as SMEs, reasons were connected to the ways their expertise was sought out by coworkers, particularly as related to writing and the technology they work with:

- Coworkers are confident they can come to me with questions about LMS [learning management system], computers, etc.
- My "subject" is communication specifics like grammar, style, usage, and general communication; my coworkers think I'm an expert at those things. I think I'm an expert at finding answers to their questions about those things.

For those who did not outright claim their expertise, responses indicate an issue in perception, whether due to the communicator's new status in the organization or how others view the communicator. When asked if they felt they were perceived as an SME by other members of their organizations, seven people replied definitely yes or probably yes, while two replied might or might not and one replied probably not. Although mostly positive, these responses may reveal some conflicts in how technical communicators view themselves and how they are viewed within an organization. While some respondents asserted that they saw themselves and were seen as an SME, others hesitated. This hesitation was likely due to their position within their organization as well as a reluctance or inability to advocate for their own value as experts.

Regardless of position in an organization, technical communicators, particularly recent graduates, can be better prepared to advocate for their experience and skills in the workforce, especially with those unfamiliar with the field. Our findings suggest that programs should explicitly prepare graduates to negotiate for their own expert status within an organization. Megan felt confident allowing her actions and writing skills to demonstrate her expertise from the start but has had to learn how to be a more vocal advocate for herself as her organization interactions became more far-reaching. A year post-graduation, Megan has found that she can assert her technical communication expertise by using competitor research on similar deliverables to support her own design directions and by stretching the commonly held idea of "traditional instructions" for her teammates. She has also learned that professional competencies, like keeping up with email, following up on all commitments, and meeting deadlines, all contribute to perceptions of a communicator's expertise. Strategies for a smooth transition from student to practitioner should be clearly outlined to ensure graduates know how to highlight their work to those who evaluate them and to their organization as a whole.

Asserting Value within Organizations

Like Megan's practice of describing her job to an SME partner from the start and completing solid work on time, we asked respondents to explain how they assert their value within the organization. For one participant, the results of effective communication were recognized based on economic gains: "Everyone within my immediate organization understands the value of technical communication. For us, we keep metrics to show our clients approximately how much money we are saving them by providing good documentation." However, some respondents saw the ways their work was invisible or misunderstood, and thus they had to resist the tendency to undervalue their work: "This is a battle I have to fight often. My [degree] is the primary way that I can voice my value in academia" [2].

Though all replied "yes" (7) or "maybe" (4) to if they felt that technical communication was valued in their fields, responses to a follow-up question indicate more mixed results. Comments ranged from active recognition of effective communication to beliefs that outside an immediate team, few recognize a communicator's value. One remarked that "It's not well known so sometimes it is overlooked and sometimes the last piece of the project." Because of this challenge, several respondents demonstrated they were aware of how they had to actively make their work visible:

- I work really, really hard to get myself noticed so they see the value in my position. I'll also cc managers on projects with positive results so they see I'm making an impact.
- We provide plain language training to other departments. Also, explaining to customers why I make the edits I do, and that my job is to help them make documents as clear as they can be to the audience.
- I try to back-up my suggestions and/or work by referencing the fundamentals of technical communication/design, and by drawing on past experiences as a technical communicator.

A few respondents indicated that justifying value involved ideas of what is "right" or "wrong" in communication instead of a more nuanced understanding of what communication entails. Some clients or SMEs believe that using a communicator's expertise means giving up control:

- Some, either through ignorance or arrogance, refuse to believe there are specific tactics for effective communication (things like consistency, organization, brevity) and feel there's no actual way to improve what they've written. Many think there is "the right way" to say something.
- Some departments see it as giving up control if they leverage our services. We explain that they are still the content owners, we are there to help them provide a consistent look, feel, and voice for company documents, but some feel this is too restrictive.
- None of my co-workers are technical communicators, so it is difficult to get them to understand why it is important to tailor communication a certain way based on the situation. They frequently want to create materials based on their own personal preferences, which is not always the best option for

> the audience and very rarely aligns with the fundamentals of technical communication […] it's hard to get them to value the work I try to do and the suggestions that I make.

The responses to this question highlight what many technical communicators face when entering the workplace: a diploma is not enough to prove one's work will be at, or is at, a certain level. When asked what training they received on advocating for their work, most respondents felt that they either received minimal training or none at all. Two mentioned that it was a topic of discussion in MATC courses, and one indicated that the advice boiled down to "know the rule you're following." Others replied with a list of technical skills and programs, which shows a possible misunderstanding of the question or that they relied on their knowledge in these areas to assert their expertise. Misunderstanding the question could further prove that little time was given to discussing this topic in the classroom. Megan also felt that little attention was paid in the program on how to argue for her skillset, beyond delivering good work. And while her work was praised as excellent, she has found that stellar work is not always enough. Technical communicators still need to assert their expertise beyond a job interview, and the findings here indicate that programs could do better in preparing students in real workplace scenarios, such as experiencing an SME disagreeing with decisions and working through how to handle that situation.

Our findings suggest that in addition to helping communicators better explain what they do and establish their roles, the program can do better in preparing students to drive their own professional development. As Schriver (2012) notes, professional development is necessary if one is to develop expertise beyond a certain skill level (p. 288). However, advanced job training and professional development are often the individual's responsibility, yet necessary to advance their careers. An academic program might be the last formal training received, placing a larger burden on graduate programs to teach students how to excel throughout their career (Kimball, 2015). Highlighting this reality could better equip students to be active learners on the job, responsible for their own advancement in future years by giving them the tools to pursue professional development on their own or by seeking out opportunities within an organization. Based on our findings and the research on expertise, technical communication programs might focus more on defining what it means to be an expert, and how that definition might change over an individual's career. Being an expert might consist of local knowledge, such as operating a certain system or program used in an organization or designing documents according to a strict style guide. In addition, conversations about expertise might include Schriver's (2012) observation that experts are usually those working on the edge of their own knowledge base, looking to learn more, or are willing to take up new challenges, with little advanced knowledge or training (p. 291). Being an expert in technical communication might be viewed as more of a mindset and approach to communication rather than a list of skills on a resume.

Finally, Megan's experience demonstrates that in establishing their value and ensuring that their organizations understand what they do, technical communicators should also be trained to resist the belief that they only work with writing when it is completed and have no role outside words on a page or a screen. As technical communication continues to expand as a field, students leave programs trained in a variety of areas, from social media to design to usability and user experience. Thus, students should be given opportunities to explore the range of possible positions that they could pursue after they graduate and could be encouraged to apply for internships in a variety of areas. In those assignments, faculty members could work with students to tailor their resumes and cover letters to promote their skills in these areas. In addition, faculty members should ensure that students think about what their skills are worth and encourage them to be reluctant to perform work without pay. While students may wish to volunteer their time and expertise, they should be conscious of the message that free labor sends to those they work with and how it might undermine any assertions of their value and their expertise.

Key Recommendations for Programs

Based on Megan's experiences and feedback from her peers, the gaps in workplace preparedness in their specific technical communication program might be indicative of programs at large. To address how technical communication graduates need to take on an SME identity and be prepared to argue for their expertise, academic programs can provide a more directed focus on training practitioners to work hand-in-hand with subject matter experts from different disciplines. In addition to a deeper-rooted change in mindset and the framing of SME status, programs can also implement tangible, practical changes. These changes, outlined below, would provide opportunities for students to explore what it means to be an expert in an organization and how best to use that status to accomplish their goals.

Asserting Expertise

Practically speaking in the classroom, preparation could begin with scripted elevator pitches, where a student is asked to create a quick summary about the work they do for someone outside of technical communication. As one respondent pointed out, and what Megan's experience speaks to as well, individuals outside of technical communication do not know what certain terms mean. Thus, part of this preparation would also focus on helping others understand the work they do and how they can contribute to the development of projects as more than an afterthought. Students could create an elevator pitch for a number of different audiences that graduates can use in a number of different situations (introducing themselves at work to new employees, network events, to an SME, etc.). Another way would be to have practicing communicators speak to various courses (or mentor individual students) to share ways that they assert their expertise.

In addition, students could practice revising their work based on a rejected idea as a way to navigate how ideas develop in connection to others on a team. As an in-class exercise, students could be given a certain writing task to complete, based on a set of requirements, or edit through a document. Then, working in pairs, a peer (playing the role of an SME) could say "no" to the work or proposal. The technical communicator can then practice receiving that feedback constructively, exploring what the SME wants completed differently, and then revising or creating an alternative to meet their needs. Alternatively, the exercise could also explore as a class what to do if an SME sticks to their "no" after the second round of revisions and how communicators can handle that conversation.

Navigating Workplace Constraints

Since the workplace rhetorical situation requires practitioners to navigate multiple stakeholders and manage a variety of constraints, these factors should be addressed in assignments. Courses should include realistic discussions about the impact of budget or an accelerated timeline on the writing and design process. To illustrate

this, professors could create an assignment where real constraints are included in the rubric—for example, students can only spend six hours working on the project or can only design their deliverable using a less robust tool than they would ideally use (such as using Word versus InDesign). Another approach would be to have an assignment change in a dramatic way halfway through the timeline and make students adapt prior to delivery. Students could then talk about how the change impacted their project in a reflective memo. One example of this type of switch could be to have students write a set of simple instructions and then have them rework their instruction set to be communicated with only visuals.

Addressing Pay and Professional Development

Because salaries are one indication of value and expertise, faculty should have real, tangible conversations about pay and what the value of a master's degree is in a specific location, specifically compared to work experience. What types of jobs will a recent graduate with a master's degree be eligible for and does it equate to a certain number of years' experience? In many instances, politeness leads pay to be discussed in a roundabout way. It would be helpful for new communicators to use tools like Glassdoor or have willing students share experiences with jobs they either used to have or were offered to them, but they didn't take. In this way, current salaries can still remain private, if needed. Exercises using anonymity might also be helpful, such as having students write down their salary anonymously and then as a class analyze the range. If a program doesn't want to talk specific numbers, more general conversations about broaching a manager about a raise could better prepare students to navigate these conversations in the workplace. Many new communicators might feel awkward bringing salary up with a manager, but little information may exist in a workplace on how to go about having these discussions productively.

Furthermore, in the development of expertise, professional development is crucial but often seen as the responsibility of the employee rather than the organization. One way to address this concern is to create an assignment for students to write a professional development request to a manager or director. These requests could be for travel funding to a conference, travel to meet with remote coworkers, or for technology and tools used every day. Professional development requests fuel continued learning in the workplace, and it often falls on an individual to ask for funding and detail why an opportunity will benefit the communicator or organization. On the job, Megan taught herself to use Adobe Illustrator and InDesign (she received the licenses through her organization) and has sought opportunities for training in the Darwin Information Typing Architecture (DITA) standard. Individuals can't only rely on academia to teach all the necessary specific skills they might need for a job; learning to request these opportunities will help create career-long learners and developing experts.

It could also be beneficial for technical communicators to learn how to express interest in different areas of the field, working with a manager or mentor to take on a new task or work assignment. As seen in our survey results, many communicators mainly write copy and edit documents ("traditional" writing tasks). If students are interested in expanding their roles to include usability and user research, interaction design, or other emerging careers in technical communication, graduate programs can offer suggestions to help initiate that type of career development. Depending on the organization, an increase or adjustment in job scope and skills could lead to a new position or an added focus in a new area.

While just a brief list of possible assignments or course topics, these suggestions aim to shift communicators' perspectives away from seeing themselves as novices or lower status and instead focus on ways to prepare students for workplace conversations regarding SME status and value, and to test their own skills as a technical communicator. They also emphasize the ways that graduates can be better positioned to understand the situations and interactions they may have within organizations.

CONCLUSION

Given the complex nature of expertise as well as the varied organizational roles technical communicators can have, academic programs must ensure graduates are prepared to negotiate for their expertise and assume an SME identity. While Megan felt that her academic training prepared her to understand the rhetorical situations of meeting user needs and navigating organizational constraints, she found conflicts in the ways the SME-communicator relationship was characterized in classes as well as what her role as an expert entailed. While the academic setting can never fully replicate the vast variations of workplaces and organizations—nor should it—programs can more intentionally equip graduates to understand the complexity of SME interactions and how to assert expertise.

Future research might examine the outcomes of some of the interventions and approaches outlined, assessing impacts across programs. In addition, research can examine the ways communicators continue expanding their expertise after they leave the program, using skills obtained as students. As Megan discovered, professional development and continued skill development is often the responsibility of the communicator. Technical communicators should leave programs prepared to continue learning, understanding how to continue developing as experts in response to the specific situations they find themselves in. As Schriver (2012) points out, expertise is less about time on the job as it is about a willingness to work at the edge of one's knowledge level. If academic programs can provide the foundation to prepare communicators to continue adding skills after they graduate, then programs will be equipping students for success.

Discussions about expertise will continue as our field explores how to best prepare graduates for the various challenges and situations they can face after leaving academic programs. Here, we aim to contribute to those conversations by looking at how Megan, a recent graduate of a master's program in technical communication, navigates the organization she works in. Her success within her organization illustrates the benefits of an education less focused on specific skills and more broadly focused on rhetorical understandings of what technical communication can do and how communicators can navigate the complexities of an organization. A rhetorical focus can enable other graduates to also understand how to assert themselves as subject matter experts, demonstrate their value, and continue expanding their knowledge and skills to benefit not only their organizations but ultimately their careers.

ENDNOTES

[1] In 2017, we surveyed recent MATC program graduates about their experiences, focusing on SME interactions and preparation for technical communication positions. This survey received IRB approval.

[2] It's likely that this respondent works in the university, as many of the students enrolled in the MATC program (and recent graduates) are also employed by the university. Thus, while the respondent may have a professional role, they interact with individuals who are faculty or who have academic backgrounds or emphases.

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