16. Hidden Arguments: Rhetoric and Persuasion in Diverse Forms of Technical Communication

Jessica McCaughey GEORGE WASHINGTON UNIVERSITY

Brian Fitzpatrick George Mason University

Abstract: This chapter explores how persuasion and rhetoric appear within technical writing forms in nuanced and unexpected ways-and in ways that new graduates are not prepared to successfully navigate. Even though the field agrees that technical writing is rhetorical, this isn't always the case in discipline-specific courses that ask students to perform technical writing forms. This qualitative, IRB-approved investigation explores interviews from three professionals who perform technical writing daily-a physician assistant, a CPA, and a labor and delivery nurse. We find that even within practical forms of writing, such as medical records and accounting documents, hidden arguments exist, and that these professionals recount that learning to write persuasively in these forms was a complex, disorienting process that took place entirely on the job. Drawing from these results, this chapter argues that by producing writing prompts and instruction centered on detailed, realistic case study situations and problem-solving, instructors can diminish the disparity between abstract classroom audiences and stakes and concrete workplace audiences and stakes, better preparing our students for real-world writing contexts.

Keywords: workplace writing, writing in the professions, writing transfer, persuasion, technical forms.

Key Takeaways:

- Persuasive and rhetorical writing are embedded within positions traditionally perceived as objective in their communications.
- Producing writing prompts and instruction centered on detailed, realistic case study situations and problem-solving can diminish the disparity between abstract classroom audiences and concrete workplace audiences.
- Courses and instructors should extend rhetorical thinking and teaching alongside the genres and modes of writing.

Cezar M. Ornatowski's (1997) chapter "Technical Communication and Rhetoric" in Foundations for Teaching Technical Communication, the text to which this DOI: https://doi.org/10.37514/TPC-B.2020.1121.2.16

collection is a response, outlines how technical communication is rhetorical and considers the ways in which we might view these rhetorical moves in a classical framework. This chapter reflects and builds upon Ornatowski's exploration, focusing on how persuasion and rhetoric appear within technical communication in nuanced and unexpected ways in the workplace—ways in which new graduates are not prepared to successfully navigate.

Inauthentic classroom experience ill equips newly graduated workplace writers with a generic sense of audience and purpose. The initial writing role of a physician assistant (PA), for instance, might look, even to themselves and their colleagues, like straightforward, templated writing. However, within this writing mode is a hidden requirement for the PA to be persuasive and convince doctors to take a case. Through failed communications and continuous interactions in their daily tasks, new workplace writers eventually develop rhetorical competencies and learn to cater their writing to their hidden roles.

This chapter offers insights about persuasion in unexpected and often subtle forms, representing a selection of data from a larger study. This qualitative, IRB-approved investigation examines the inherent reconceptualization efforts, particularly in the context of industry-specific technical writing that is typically viewed as informational and straightforward. The approach we've taken is rooted in a grounded theory methodology, which emphasizes intensive interviewing with an increased flexibility that allows for follow-up questions and, perhaps more practically, memoing, a "constant-comparison" method, and more than one round of coding (initial and focused; Charmaz, 2014). Using this methodology, we ask the following questions: In what unexpected/unexplored ways does persuasive writing happen in technical fields, and how do communicators learn to make these arguments? Further, how can writing instructors better prepare students for these particular writing situations?

It's important to note that this study is about workplace writers who do *not* identify as technical or professional writers. They see their primary job functions as something other than writing, but they perform, like almost all professionals, a significant amount of writing for their work. The study contains, at this time, 48 interviews with working professionals and examines the university-to-workplace transition. Their job titles range from lawyer to foreign affairs officer to lab manager, as a small sampling, and their time on the job ranges from one year to thirty years. Participants were asked a set of 18 questions, with occasional follow-up questions. These questions centered on the writing they perform on the job and their perceptions about how they developed the skills necessary to succeed in this writing. For instance, we ask, "Could you walk us through the process for one specific recent project or type of project?" and "Can you describe a time in your career that you felt unprepared as a writer at work?"

In this study, we see narratives of students transitioning into professionals, struggling to acquire the skills necessary to thrive as they encounter hidden or unexpected persuasive opportunities. This chapter examines interviews with three such professionals (a certified public accountant [CPA], a labor and delivery nurse, and a neurosurgery physician assistant [PA]), each of whom perform technical writing daily and whose experiences stand out as examples of the ways in which persuasive and rhetorical writing are embedded within positions traditionally perceived as objective in their communications.

These concrete examples add to the body of research on transfer, or the ways individuals gain one kind of knowledge—in this case, technical writing skills—in a particular context and then apply the related skills in a different context. We explore not only the nuanced persuasive writing happening in these technical documents but also how professionals perceive this skill acquisition. The professionals reflect on the roles of university learning and on-the-job experiences in their growth as communicators as they transitioned into the workplace, considering the ways in which they were unprepared and expressing what they wish they'd learned in their writing classes.

Changing Views of Technical Communication

Carolyn R. Miller's seminal 1979 article, "A Humanistic Rationale for Technical Writing," addressed the problematic and then-common view that "science and rhetoric are mutually exclusive" (p. 611). She knew, and many technical writing teachers and scholars since then have agreed, that technical writing isn't—or shouldn't be—simply documenting or instructing. She acknowledged, however, the extreme challenge of teaching scientific or technical writing as more complicated and rhetorical. Miller (1979) claims that good technical writing should be "a persuasive version of experience" (p. 616). She asks, "Why has it been so difficult in a technical writing class to talk about the relationship between writer and readers and the reasons for saying anything about a subject in the first place?" (p. 615). This question can extend to include any workplace writers performing "technical communication." Whether in the classroom or on the job, why has it been so difficult to talk with nuance about the complicated persuasive work that we perform in our documents?

For many years, technical communication was primarily thought of and taught as expository and informative, rules- and conventions-based. Early technical writing textbooks were decidedly anti-rhetorical thinking. Typical excerpts from the 1970s include "[t]echnical writing is expected to be objective, scientifically impartial, utterly clear, and unemotional . . . concerned with facts" and "[t]echnical writing has one certain, clear purpose: to convey information and ideas accurately and efficiently" (Miller, 1979, p. 611). Not until 1993 did Jennifer D. Slack and colleagues describe the transmission, translation, and articulation views of technical communicators. Even in the late 1990s, nuanced persuasive skills were not generally thought of as skills crucial to technical communication (Grice, 1997). More recently, though, several scholars—most notably Erin A. Frost and Michelle F. Eble (2015)—have argued that technical communication

is "implicitly persuasive" and encouraged technical communicators to be more open, particularly to public audiences, about "the persuasive nature of technical communication" (p. 1). In some technical writing classrooms, students are learning about promoting social justice through technical communication and about equality or accessibility as a responsibility of the technical communicator. Those pursuing technical writing as a profession are now receiving instruction about the rhetorical nature of what might have been called "neutral" or "objective" 20 or 30 years ago.

We know that a lot of teachers are successfully taking this scholarly view and putting it into practice in their classrooms. For instance, many look towards concepts such as rhetorical problem solving as a way of grounding technical communication pedagogy (Karatsolis et al., 2016). Still, when instructors frame technical communication as rhetorical and persuasive, many do so only around explicitly persuasive forms, such as proposals and other "public" technical texts (Frost & Eble, 2015)—implying that traditional technical writing (which can, of course, mean many things) is not argumentative. In many textbooks we still see what might only be called a "nod" to rhetorical awareness. Even many recent popular technical, professional, and workplace writing textbooks speak only broadly to "considering the needs of your audience" (Alred et al., 2015, p. 3) and ask writers to "try to see from another person's point of view, beyond your own personal concerns" (Marsen, 2013, p. 203). Others encourage writers to work towards "understanding" or "considering" purpose, that a document "must be tailored to its intended audience; otherwise, it probably won't achieve the desired results" (Searles, 2013, p. 3). Those texts that explicitly have sections like "Principles of Persuasion" do not go beyond extremely simple concepts, such as "[d]on't get bogged down in unnecessary details or arguments" (Blake & Bly, 2000, p. 86) and "[c]onsider Whether Your Views Will Make Problems for Readers" (Ewing, 2010, p. 231). Examinations of situations that call for "persuasive" writing always use examples that are explicitly so (Lannon & Gurak, 2013, p. 13).

We see even less of this rhetorical thinking about texts at play in discipline-specific writing textbooks. A text on writing for accountants emphasizes, alongside standard organization and conciseness, a generic nod towards "communication skills" and "appropriate style" (May, 2014). Likewise, many medical texts discuss audience only in terms of tone and expected length and structure of each document type. When these texts do engage in more explicit rhetorical discussions ("Who is going to read this? What do I know about my audience? How do I make decisions about language?"), it is generally either in the abstract (unapplied to any particular technical form) or applied to modes of writing not applicable to the technical discipline itself (advertising/marketing, poetry, press releases). Few, if any, texts apply the persuasive/rhetorical lens to forms seen as explicitly practical and expository or that genuinely offer scenarios or strategies related to the specific profession for complex audience analysis. These textbooks for professionals performing technical writing across industries and roles brush up against rhetorical thinking but rarely go beyond a superficial treatment. In discipline-specific writing situations particularly, we do our students a disservice by not acknowledging and teaching towards the persuasive and rhetorical writing they can expect to encounter within technical forms. Specifically, in fields not focused on writing but in which professionals must write technical documents consistently, graduates do not seem to be examining the rhetorical purpose of their field's writing. While many of our students will not be technical writers formally, they will be asked—sometimes daily or even hourly, depending on their profession—to perform technical writing. It's important, then, to make a key distinction between teaching technical communication and teaching the technical writing that happens in "the professions."

Forms, Documentation, and Persuasion

Professional writing adheres to certain conventions created by the organization or industry (Winsor, 1989), and at times, persuasive writing might be a part of those conventions. Robert I. Williams (1983) argues that technical writing forms, in and of themselves, are persuasive, and that "the very conventionality of format works in the writer's favor" (p. 11) when technical communicators are working in traditional forms. The "message of the standard format is that this is a sound document" (Williams, 1983, p. 12). Moving beyond the form itself reveals even more hidden moments of argument and persuasion in the practical execution of these documents.

We can see such moments of hidden persuasive communication clearly in the interviews of our three professionals: the CPA, the neurology PA, and the labor and delivery nurse. All describe finding themselves, immediately upon entering the workforce, encountering forms of writing thought of as (and sometimes explicitly stated to be) straightforward and objective, as many organizations still adhere to the "transmission" view, or the idea that technical communicators are simply "the neutral vehicle" conveying meaning from one place to another (Slack et al., 1993, p. 14). The CPA, for instance, writes a letter to the IRS that one might assume is essentially a form letter; the two medical professionals work within templates constrained by the medical records system. They are asked to "fill in the blanks" in some sense, to write down what they and others around them refer to as strictly factual documented," as though their understanding of everything that occurs in their work is a fact, with no grey area. These forms appear, at first, to leave little room for individual perception, opinion, or motive.

One clear example of this can be seen in our interview with a neurosurgery PA who works in an emergency room. She describes her writing in this way:

Documentation is pretty important in medicine. [These documents] are electronic, typed consultation notes or history and physicals. Also, daily progress notes ... and physical exams. And for OR procedures, a brief summary of the procedure itself Most of our writing is actually in template form. So it doesn't really take too much time, and most documentation will include a summary of the patient themselves and their background, specifically their past medical history and things that are pertinent to their hospital stay They will also include a physical exam, so my exam of the patient and a plan. So plans for all of the diagnoses that the patient has, and documentation that my attendings and surgeons have agreed to plans that I'm making.

Likewise, when discussing the kinds of writing performed on the job, the labor and delivery nurse repeatedly references "documentation" and the constrained and objective nature of these forms, even when they are narrative or descriptive:

So most of the writing that takes place as a staff nurse is on an electronic medical record, where we joke that it's an elaborate billing system, because it is, but they try to make it as easy for the billers to use as possible, and as easy for you to not get yourself in trouble as possible. So they do a lot of like, selecting options for charting, so it's like a column where you select options, you can type in things like, you know, blood pressures, or temperatures, and then you can select options for pain levels, or assessment findings, like color of the skin, they'll give you options like, "appropriate for ethnicity, warm, dry, clammy, red, hot, weeping," like tons of different options.... there's also notes you write that are more narrative And it's really easy when you're using click boxes to fill in your answers to, if you're not being careful, just fill in like your normal answers, like the standards, and then if you write something different in a note, and it contradicts what you already charted, it makes it look like you're not competent. So you're trying to make sure that you're being consistent with what you're writing unless it's actually discussing a change.

A standard form of communication for nearly all medical professionals, electronic medical records are, again, generally thought of as strictly objective documentation. In the classroom, too, such communication is framed consistently by instructors and by textbooks as "neutral," "template-based," or strictly informational or factual. The idea of simply "recording information" is so ingrained that the interviewees still explain their work in this way despite offering examples of particularly complex, persuasive compositions. The CPA, for example, talks about "being able to keep it neutral" in much of her writing. The PA consistently describes her writing as simply "documentation." The labor and delivery nurse describes the electronic medical record, jokingly, as "an elaborate billing system" and a tool that makes it as easy as possible for you to "not get yourself in trouble." She acknowledges the possibility of a situation in which a failure to document something she did could have an impact on care, but generally trivializes her charting, saying it's "mostly going to be proof that I've followed up on things, and acknowledged things, and noticed changes." She defines success as a writer in her position as having "more to do with how quickly and efficiently can I say the bare minimum to show that I did my job."

To these writers, even complex rhetorical moves seem to feel mechanical, supporting the assertion that "[w]orkplace writers are far more skilled and accomplished than they themselves or their managers acknowledge" (Dias et al., 1999, p. 233). For example, when asked to describe a specific writing experience, it becomes clear that at least some of the writing the PA performs requires rhetorical flexibility and persuasion:

I think the way that I approach it is, how do I shape his story into something that's going to catch someone's attention? So most of us in medicine, like if I get a call of a consult to say, "Hey this patient has some kind of an issue and it looks like they have a fracture in a bone near the ear," I'm immediately checked out thinking, "Why are you calling a neurosurgeon for this? We don't take care of this. I'm not interested." So same thing if I'm trying to talk to a [medical] doctor. I'm trying to frame my note that would be appealing to them to say, "Hey this is exactly why we need you, and this is why we hope that you're going to accept our patient," because there is still, you know, some procedure in the hospital involved once a surgical problem is managed and taken care of, you want to transfer your patient to a doctor that can better take care of their medical needs, things that I don't really manage myself. So you want to try to kind of frame the patient as, "Oh this is a really interesting medical patient now that we're done with the surgical part of things." So having to write something in a way that's going to make it relevant to other people and catch their attention is a big challenge in writing and I think it's a challenge that's kind of fun to try to do.

The PA states that she wasn't taught to write compelling narratives about her patients to convince doctors to take them on; this work is implicit and unspoken. Both she and the labor and delivery nurse describe their respective typical writing forms as objective record-keeping and documentation of fact. Interestingly though, both describe situations in which the authentic professional and medical circumstances require this writing to serve other purposes. It's important to note that such forms are not limited to accounting and medical professions. Content management (CM) systems, for instance, mimic similar constraints; their form presents a "simple" way to create and store information or text. Many argue that for the sake of "ease," such systems strip rhetorical agency from communicators, who are then "relegated to working within the confines of . . . systems that, in most cases, others have designed. These writers are not tasked with making situated rhetorical decisions" (Andersen, 2014, p. 121). But these writers do make rhetorical decisions, even within the confines of limited text boxes. These forms, while generally perceived as templated or mechanical, do in fact require more complex awareness and writing skill from professionals who understand well their audiences, purposes, and larger organizational contexts. Persuasive writing happens, then, at both the textual and the metatextual levels.

The genre of the technical writing form itself, according to Williams (1983), is persuasion of authority; working successfully within the constraints and expectations of a form argues to the audience that this "is a sound document." The nurse who successfully records the state of her patient shows her understanding of not only the software but also of her role, particularly in the context of staying "in her own lane," as we'll see below. Through the structural and formal constraints of its genre, the form actually argues against its own persuasion. Consider again, the patient chart: its checkmarks and small text boxes demand shorthand expository writing, using objectively clinical and fragmented language. The stated goal for these documents is to serve as records and for the writer to get to the point efficiently and accurately. However, if the workplace writer explicitly follows the constraints of pure objectivity and simple documentation that the template itself requests, the writer ultimately cannot succeed in the real world. For example, the labor and delivery nurse recounts navigating these hidden moments of persuasion:

I remember having to sit there and write notes with people, and you would always seek out like someone you felt comfortable with and saying, "Can you help me write this note? This difficult thing happened." Like generally then, it had to do with pain management, and you couldn't get anesthesia to get there on time, or something like that, right? Patient's in pain, you're out of pain medicine, anesthesia isn't coming, it took an hour, your patient hates you now, you know, something like that [laughter], and you have to be careful not to write, "I called anesthesia a hundred million times and they didn't want to come, because they didn't like the page," like, you can't write that, right? So, it's like going back in time and someone you know, teaching you how to write, okay, write a note for the first time that you notified anesthesia. And then write another note that says, "notified anesthesia." Write another note that says, "notified anesthesia, anesthesia now in rounds," you know, and you write it that way. Like these little one-line notes that say, "Hey, I did it. Hey, I did it. Hey, I did it." And as someone showing you, instead of writing one long note, it shows this persistence, for example....

[I]f I was concerned about a patient, let's say she had chest pain after delivery, and I was concerned, and I took some vital signs and everything was normal, and her bleeding was all normal, and everything was great. But I'm still going to . . . let the physician know, "Hey, she's having chest pain. This is her blood pressure, this is her heart rate, this is her temp., this is what her bleeding is like." And if they say like, "I'm not worried about it." And then I'm like, "Well, don't you want an EKG?" If the provider's like, "No, I don't." Okay, so I don't want to write a note that says that exactly, because it makes them look like they're not doing their job, even if I feel that way. So, I have to write, for example, . . . "Patient complained of chest pain." I might like list the vital signs, [and] "Provider notified, no new orders."

In both cases, adhering strictly to the perceived objectivity and documentation of the form would undercut a colleague's authority or result in reduced quality of patient care. The new workplace writer mistakes the form and its constraints as signals that the required writing must be not just objective but also explicitly not persuasive. The form, by way of its clinical template, actively hides its opportunities for persuasion; only through understanding and resolving metatextual issues—in this case, collegial relationships—can a writer recognize the hidden demands for persuasion and resolve such discrepancies to succeed in their writing.

We see this play out differently for the CPA in her own understanding of the need for persuasion within what is generally referred to as a "form letter" that she prepares and sends to the IRS on behalf of a client. She initially describes the letter as usually "kind of standard," in that she records and reports to the government required details and information on a client's finances. However, she acknowledges that her purpose for writing is to make a case for forgiveness for her client:

I'd [ask the client] what are the circumstances, and then you write the saddest story that the truth will allow If you're requesting like an abatement of a penalty or something, ... it's "my dog died, my wife got sick, my car broke down, and I ran out of" ... you know, it's just whatever the circumstances are, you write it in a way that's like, "it was so sad and it was so awful and they couldn't possibly have filed that day. But look! They did it two days later and it will never happen again and they have reached out to a professional to ensure [that] and we're on top of it." And that's sort of how you write these things.

She is, of course, not simply writing about the numbers in this form letter, as we might expect. The phrase "the saddest story that the truth will allow" in-

herently describes the contradiction between the objective form she sees herself writing in and the authentic goals of her correspondence. It is the truth, framed purposefully and rhetorically as advocacy on behalf of her client. The CPA, the PA, and the labor and delivery nurse all write as "advocates" on behalf of their clients or patients; rarely, though, do they frame their technical documentation as championing.

To that end, for all three of these workplace writers, efficacy is determined by two factors: successful advocacy on behalf of their patients/clients and learning the rules wherein the former becomes possible. Each of these writers progressed from failed writing attempts to successful ones via either their own or witnessed failed attempts. They each can point to these past failures in very tangible, practical ways. As the CPA states, she learns based on what works: "I guess if it's like an appeal . . . whether it's successful or not." Similarly, the PA learned through experience that patients not presented as "interesting" enough for the neurologist are not chosen to be seen by the specialist. Meanwhile, the labor and delivery nurse cautions against explicitly indicting a colleague in a document of record. The stakes and possible repercussions are not limited to just the workplace writer. Even more compellingly, perhaps, they extend to the writers' clients and patients, for whom the stakes—financial or medical—are even higher.

Each workplace writer defines success as their writing contributing to the desired outcome for the people for whom they are advocating. The gravity of their charges' situations clearly motivates the writers, although they may feel or express this only in the abstract. And yet concretely, it seems as though a fully developed awareness of this context informs the mechanics of how they approach their texts.

While we as instructors cannot authentically replicate the empathy and desire to write well on behalf of a medical patient, we can at least model for our students the mechanism for this kind of successful writing—a strong foundation in rhetorical awareness and decision making. We can also show them very clear, real-world examples that model the authentic situation and what it might entail. We can't, metaphorically speaking, take them to Mount Everest to prepare them to climb it. However, we can expose them to the real experiences of those who have climbed it and the lessons they've learned. We can offer them practice in the specific conditions they can expect not just on any mountain, but on the one they will face. Preparing students for writing targeted to their specific goal workplaces is a clear improvement from generically preparing students for writing in the workplace.

Application

The tensions Katherine Staples and Cezar M. Ornatowski (1997) articulate between the university and the workplace still exist. Though our study catalogs the experiences of workplace writers after they have left the classroom, the interviews we've highlighted from it clearly have pedagogical implications for the classroom. This final section will examine how instructors rely (often necessarily) on generic and inauthentic forms (Anson & Forsberg, 1990) and how we must change these patterns in order to reinforce to students the opportunities—and needs, in some cases—for persuasive, rhetorically complex workplace writing.

The limited nature of the classroom itself challenges the application of what we understand about classroom teaching and transfer of writing skills into real-world technical writing spaces. Chris M. Anson and L. Lee Forsberg (1990) assert that students struggle in their transition because of classroom writing's rhetorical limitations and its tendency to focus on "generic skills," rather than on "developing strategies for social and intellectual adaptation," applicable across both academic and professional writing contexts (p. 201). They highlight the gap between the phases of *Expectation* and *Disorientation*, wherein a writer with a series of past successful assignments, writing to hypothetical, generic audiences with abstract stakes, is jarred when their writing expectations become incongruous with the new and newly elevated stakes of the authentic workplace. The *Disorientation* phase (Anson & Forsberg, 1990) makes adapting to specific workplace contexts difficult for students, contributing to what Rebecca S. Nowacek (2011) categorizes as challenging "reconceptualization" efforts once graduates begin writing in the workplace.

The broad view of technical writing as a homogenous field emphasizes rote recall of forms and conventions over what we argue are more valuable and versatile skills. Based on the findings above, we argue that students must be immersed in genuinely authentic forms and examine and practice the nuanced persuasive writing types we see in the three example writers' experiences. If we better understand not only the work these communicators perform, but also how they perceive their acquisition of their skills, then we can build into our courses transfer-based activities and ways of thinking (Elon, 2015) so that students can take what they've learned in highly specific texts and apply them in very different, although equally nuanced, persuasive writing situations.

All too often, unless students take explicit technical writing courses, the explicit teaching of rhetoric and persuasion falls to the wayside once students have passed beyond first-year composition (FYC). In the types of major classes professionals like those in this study take, they may see acknowledgments of generic or implied rhetoric (formal vs. informal tone, active vs. passive voice), but a lack of access to authentic forms and the limitations of the classroom make it a struggle to teach concrete and authentic strategies of persuasion. Imagine, for example, a pre-med/nursing student being told that "your audience is a doctor." To a student without the proper context (and industry experience) of the authentic situation, this might mean no more than "your audience is formal, so don't use contractions," and perhaps "use technical jargon." But this audience is, of course, more rhetorically complex than this quick assessment suggests. Consider the following from an interview with the PA: [The doctor] want[s] something interesting . . . [They are] also protective of their workload because, you know, I'm maybe seeing 30 patients on my service and then I'm saying, "Oh my god," I'm having five other people try to give me other patients so I'm thinking, "Okay, do I really want this patient that's not . . . really relevant to me? Or do I want the ones that are specifically neurosurgery? Yes, I can do something to help you," that kind of thing.

The difference between the generic and abstract idea of "doctor" as audience versus a concrete touchstone is significant. While the FYC student may have a generic sense of audience and in turn a generic rhetorical response to that prompt, our workplace writer, a PA with the authentic experience and workplace context, understands her audience with additional, crucial nuance. Her audience insights—doctors are overworked, "protective of their workload" and reputation, and also want to serve patients with cases related to their research interests—lead to a set of focused and tangible rhetorical decisions that can be made and seen in her writing.

The first chapter of Michael A. Arntfield and James W. Johnston's 2016 textbook *Healthcare Writing: A Practical Guide to Professional Success* covers "in-patient writing," including charting, reporting, and writing notes in what they designate as "expository prose." This text does a better job than most acknowledging how complicated the field's various audiences are and the rhetorical nature of medical documentation. Sub-sections like "Rhetoric and Rhetorical Modes" acknowledge audience, context, and purpose as key factors in small-space medical charts. The text offers the following examples, in a chapter regarding clear and concise technical writing of patient notes, charts, and reports:

A 19-year-old female patient came into the emergency room with a friend who drove her, and complained in detail that she had been feeling very sick to her stomach for several days, having begun vomiting earlier in the afternoon. The patient appeared pale and disheveled and explained that this has never happened to her before, and that she hadn't been able to hold down as much as a glass of water since yesterday morning. (Arntfield & Johnston, 2016, p. 20)

An improved excerpt they offer reads:

19-year old female patient attended the emergency room complaining and presenting with symptoms of severe nausea with vomiting, and with no known cause. No previous history disclosed and patient unable to ingest food or water in over 24 hours. (Arntfield & Johnston, 2016, p. 20)

A textbook example like this, advocating for fewer words and direct, catalogued language, seems like common-sense best practice. Without the understanding that these technical professionals are, in fact, writing nuanced rhetorically complex persuasive documents, and without access to authentic and detailed real-world experiences, this example-focusing primarily on economy of language and direct prose-represents successful technical documentation. In a hospital setting, there is genuine value in concision and efficient use of already constrained time and writing space. As authentic as this example may appear on the surface, the reality is that textbooks operate under the same constraints that classrooms do, including the constraint of inauthentic situation. The example implies that the critical skill of this writing style is capturing the message in as few words as possible, but it doesn't acknowledge, as the PA and labor and delivery nurse do, the varied contextual factors at play in determining successful writing in these situations. So, while this text serves as a model for employing concision in technical writing when physical writing space is constrained, like many other textbooks, it operates under one of two assumptions: every situation these workplace writers will encounter is similarly straightforward and will require only "transmissive" documentation (Slack et al., 1993, p. 14), or the student-reader will know which information is important (without genuine experience in the profession or direct access to professionals modeling the complexities of these detailed situations, they cannot). The interviews with healthcare professionals we present here both emphasize the importance of thorough documentation; the question for this field, then, becomes "How does a new workplace writer in this situation learn to make the distinction between comprehensive documentation and relevant documentation?"

Similarly, as teachers, we are forced to teach a typical approach to writing forms—understood best approaches or the "middle-of the road." Sometimes even strong writing assignments still teach either to an abstract understanding of form or to an audience or purpose without authentic stakes (beyond a student's grade). We might teach certain writing decisions as "typical" for proposals, résumés, reports—that students should use a certain kind of language or keep certain kinds of audiences' concerns in mind. Without real stakes or a genuine, knowable audience, though, these ideas do not develop beyond the hypothetical ideal. Textbook examples and classroom assignments are often devoid of the authentic stakes and audiences established in real workplace writing. Further, students taught to take a best-average approach to writing forms will likely struggle, once in the workplace, to diverge from those same abstract norms.

Training a student to continuously navigate to the middle of a figurative road in their writing takes for granted their future flexibility when the road itself becomes fully realized and fraught with obstacles. In successful transfer, a student enters a workplace with the ability to recognize the average of those modal practices and the awareness to shift direction as the authentic audience, genre, and purpose require. When we present technical writing modes only at face value, as documentation, we obscure their complexity and create hidden moments of persuasion that require rhetorical maneuvering to address a complex and knowable audience or make choices about factors such as audience, genre, and purpose. Without acknowledging that these technical writing forms are and will continue to be persuasive when real audiences are introduced, students won't know which choices to make, nor recognize when exactly those opportunities for choices even arise.

How do we fix what sounds like an impossible problem with only imperfect solutions? While there are always limitations to how disciplinary classrooms and their texts can close the gap of authenticity, continuously emphasizing and explicitly teaching rhetoric when teaching technical forms and writing can fortify a student's rhetorical flexibility and capacity to navigate the remaining gaps and complications they'll encounter in workplace writing. Courses and instructors should extend rhetorical thinking and teaching alongside the genres and modes of writing. This exercise becomes more complex and focused as it relates to specific workplace writing expectations and focuses on solving the authentic problems that workplace writers encounter.

Between FYC and upper-level technical writing courses, the focus often shifts from rhetorical awareness and persuasive modes to elements like disciplinary structure, style, and diction. It's arguably more important, though, as students progress deeper into the complex pockets of disciplinary technical writing, that they continue their rhetorical educations. Having an instructor familiar with the technical and formal expectations of the field's forms, audiences, and purposes will also mean having an instructor capable of helping students apply their broad understanding of rhetoric in these more specific and authentic writing spaces.

Producing writing prompts and instruction centered on detailed, realistic case study situations can diminish (but likely not eliminate) the disparity between abstract classroom audiences and stakes and concrete workplace audiences and stakes. Rather than relying on generic business or technical writing practices and modes, or sometimes outdated forms untethered to specific disciplines or industries (memo, business letter, or generic proposal; Dias et al., 1999), we must do our best to tailor writing assignments as closely as possible to the real-world writing contexts in which our students will be asked to perform. For instance, an assignment constructed around the case study of our physician assistant might provide not only information about the purpose of the piece of writing, but also a knowable and researchable audience-doctor, overworked, protective of their caseload, etc. In fact, the writing a student is asked to perform may not even mimic traditional correspondence with the doctor, but rather take the form of an audience assessment that helps them to understand the rhetorical choices necessary in such a correspondence in their future careers. An assignment for accounting students should go beyond what we think of as traditional best practices in the field (accuracy, formality, objectivity) and consider the nuanced persuasive writing that takes place when advocating to the IRS on behalf of a client, particularly when such advocacy might require less expected tactics, such as emotional appeals. In nursing programs, students should consider not only issues of conciseness in writing medical records, but also how potentially complex their narrative and persuasive language choices can be in a medical chart for real patients.

In each of these examples, the focus is ultimately on making these moments of hidden persuasion visible and explicit for the developing writer.

We must find inventive ways to effectively capture complex rhetorical situations and have students interrogate and work through them. This can be achieved through guest speakers, case studies, or other points of access to the truly specific and complex ways in which workplace writers are asked to write. Modeling and/or creating these more authentic situations will enable our students to first observe and imitate examination of and response to these technical forms, and eventually, with more experience, uncover the complexities themselves. In understanding the hidden demands of audience and purpose within these forms, the student-writer grows into the workplace-writer role. Imitation falls away and the challenge of writing within the authentic context resolves.

References

- Alred, G., Oliu, W. E., & Brusaw, C. T. (2015). *The business writer's handbook* (11th ed.). Bedford; St. Martin's.
- Andersen, R. (2014). Rhetorical work in the age of content management: Implications for the field of technical communication. *Journal of Business and Technical Communication*, 28(2), 115-157. https://doi.org/10.1177/1050651913513904
- Anson, C. M., & Forsberg, L. L. (1990). Moving beyond the academic community transitional stages in professional writing. *Written Communication*, 7(2), 200-231.
- Arntfield, M., & Johnston, J. (2016). *Healthcare writing: A practical guide to professional success*. Broadview Press.
- Blake, G., & Bly, R. W. (2000). Elements of technical writing: The essential guide to writing clear, concise proposals, reports, manuals, letters, memos, and other documents in every technical field. Pearson.
- Charmaz, K. (2014). Constructing grounded theory (2nd ed.). Sage.
- Dias, P., Freedman, A., Medway, P., & Pare, A. (1999). *Worlds apart: Acting and writing in academic and workplace contexts*. Lawrence Erlbaum Associates.
- Elon Center for Engaged Learning. (2015). *Elon statement on writing transfer*. http://cel. wpengine.com/wp-content/uploads/2014/09/Elon-Statement-Writing-Transfer-2015.pdf
- Ewing, D. (2010). Strategies of persuasion. In K. J. Harty (Ed.), *Strategies for business and technical writing* (7th ed., pp. 231-242). Longman.
- Frost, E. A., & Eble, M. F. (2015). Technical rhetorics: Making specialized persuasion apparent to public audiences. *Present Tense*, 4(2). https://www.presenttensejournal. org/volume-4/technical-rhetorics-making-specialized-persuasion-apparent-to-public-audiences/
- Grice, R. A. (1997). Professional roles: Technical writer. In K. Staples & C. Ornatowski (Eds.), Foundations for teaching technical communication: Theory, practice, and program design (pp. 209–220). Ablex.
- Karatsolis, A., Ishizaki, S., Lovett, M., Rohrbach, S., & Kaufer, M. (2016). Supporting technical professionals' metacognitive development in technical communication through contrasting rhetorical problem solving. *Technical Communication Quarterly*, 25(4), 244–259. https://doi.org/10.1080/10572252.2016.1221141

Lannon, J. M., & Gurak, L. (2013). Technical communication (3rd ed.). Pearson.

- Marsen, S. (2013). Palgrave study skills: Professional writing (3rd ed.). Red Globe Press.
- May, G. S. (2014). *Effective writing a handbook for accountants* (10th ed.). Pearson Education.
- Miller, C. (1979). A humanistic rationale for technical writing. *College English*, 40(6), 610-617. https://doi.org/10.2307/375964
- Nowacek, R. S. (2011). *Agents of integration: Understanding transfer as a rhetorical act.* Southern Illinois University Press.
- Ornatowski, C. M. (1997). Technical communication and rhetoric. In K. Staples & C. Ornatowski (Eds.), *Foundations for teaching technical communication: Theory, practice, and program design* (pp. 31-52). Ablex.
- Searles, G. J. (2013). Workplace communication (6th ed.). Pearson.
- Slack, J. D., Miller, D. J., & Doak, J. (1993). The technical communicator as author: Meaning, power, authority. *Journal of Business and Technical Communication*, 7(12), 12-36.
- Staples, K., & Ornatowski, C. M. (Eds.). (1997). Foundations for teaching technical communication: Theory, practice, and program design. Ablex.
- Williams, R. I. (1983). Playing with format, style, and reader assumptions. *Technical Communication*, 30, 11-13.
- Winsor, D. A. (1989). An engineer's writing and the corporate construction of knowledge. *Written Communication*, 6(5), 270-285.